

\*\* FILE NOTATIONS \*\*

DATE: January 9, 1980  
OPERATOR: Tiger Oil Company  
WELL No. Federal #1421  
LOCATION: SEC. 21 T. 26S R. 7E COUNTY Emery

FILE PREPARED:  ENTERED ON NID:   
CARD INDEXED:  COMPLETION SHEET:

API NUMBER: 43-015-30079

CHECKED BY:  
GEOLOGICAL ENGINEER: \_\_\_\_\_  
\_\_\_\_\_

PETROLEUM ENGINEER: \_\_\_\_\_  
\_\_\_\_\_

DIRECTOR: \_\_\_\_\_

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 fed PLOTTED ON MAP

APPROVAL LETTER WRITTEN   
lctm

#1

NE  
PI

January 18, 1980

Tiger Oil Company  
P.O. Box 113  
Wheat Ridge, Colorado 80033

Re: Well No. Federal 11-4, Sec. 4, T. 27S, R. 7E., Wayne County, Utah  
Well No. Federal 12-27, Sec. 27, T. 26S, R. 7E., Emery County, Utah  
Well No. Federal 14-9, Sec. 9, T. 26S, R. 7E., Emery County, Utah  
Well No. Federal 14-21, Sec. 21, T. 26S, R. 7E., Emery County, Utah  
Well No. Federal 41-8, Sec. 8, T. 27S, R. 7E., Wayne County, Utah

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

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

MICHAEL T. MINDER  
Geological 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 #11-4 - 43-055-30027; #12-27 - 43-015-30072; #14-9 - 43-015-30073; #14-21 - 43-015-30074; #41-8 - 43-055-30028.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder  
Geological Engineer

/btm  
cc: USGS

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

**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  
 E. M. Davis d/b/a Tiger Oil Company

3. ADDRESS OF OPERATOR  
 P. O. BOX 113, Wheat Ridge, Colorado 80033

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface: 550' FWL 530' FSL (SW SW)  
 At proposed prod. zone: Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 31.0 miles from Cainsville, Utah (Exhibit "E")

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINK, FT. (Also to nearest drlg. unit line, if any) 530'

16. NO. OF ACRES IN LEASE  
 2,320.00

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 40-acres

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH  
 4750'

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 5724' ground

22. APPROX. DATE WORK WILL START\*  
 February 1, 1980

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8" K-55	36#	250'	250 sacks
8 3/4"	5 1/2" K-55	14#	4750'	300 sacks.

1. Drill 12 1/4" hole to 250' and set surface casing.
2. To log BOP's daily while drilling 8 3/4" hole
3. Run electric logs, test as needed, and run production casing
4. To perforate and stimulate as cited in Exhibit "B"

EXHIBITS ATTACHED:

- |  |                                      |
|--|--------------------------------------|
| "A" Location and Elevation Plat                              | "G" Production Facilities Layout     |
| "B" Ten-point Compliance Program                             | "H" Drill Pad Contours and Cut-fill. |
| "C" The B.O.P. Diagram                                       | Letter of Agency for Pentress        |
| "D" Multipoint Requirements                                  | A-ERC Archeological Report           |
| "E" Access Route from Cainsville, and From Fremont Junction. | Designation of Operator              |
| "F" Drilling Rig Layout                                      |                                      |

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 E. M. Davis TITLE Ass't Chief Engineer DATE December 26, 1979

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE FEB 15 1980

APPROVED BY (ORIG. SGD.) E. W. GUYNN TITLE DISTRICT ENGINEER DATE FEB 15 1980

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED

\*TO OPERATOR'S COPY

NOTICE OF APPROVAL

Utah O. & G.

**RECEIVED**

FEB 15 1980

FEB 15 1980

DIVISION OF OIL, GAS & MINING

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

U. S. GEOLOGICAL SURVEY - CONSERVATION DIVISION

FROM: : DISTRICT GEOLOGIST, ME, SALT LAKE CITY, UTAH

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

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. U-11374

OPERATOR: E. M. Davis d/b/a Tiger Oil Company WELL NO. Federal #4-21

LOCATION: ¼ SW ¼ SW ¼ sec. 21, T. 26S, R. 7E, SLBL ¼ M  
Emery County, Utah

	<u>Fm.</u>	<u>Depth</u>	<u>Datum</u>
1. Stratigraphy:	Carmel	surface	
	Navajo	90'	(+) 5634
	Chinle	1540	(+) 4194
	Moenkopi	1990	(+) 3734
	Sinbad	2570	(+) 3154
	Kaibab	2845	(+) 2879
	Toroweap	3000	(+) 2724
	Wolfcamp-Penn		(+) 1779

2. Fresh Water: see attached WRD report.

3. Leasable Minerals: None

4. Additional Logs Needed: None. Operator's program is adequate.

5. Potential Geologic Hazards: None anticipated.

6. References and Remarks: U.S.G.S. Files Outside KGS.  
 SLCC, Utah

Signature: J Paul Matheny Date: 1-20-80

REQUEST FOR INFORMATION FROM WATER RESOURCES DIVISION

Date 1-17-80

Person and Division making request Paul Matheny - Mineral Eval.

AREA: County and State Wayne Co., Utah

Township 27 <sup>N</sup> <sub>(S)</sub> Range 7 <sup>(E)</sup> W Section 4  $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  SL BL&M

Altitude of surface at site 5750 Formation at surface (if known) Carmel

PURPOSE:

Protection of useful ground water (casing program); check   
 Other (describe):

For WRD use

Date in: Jan. 17, 1980  
Jan. 7, 1980

Person assigned: J.W. Hood

Date out:

**Evaluation:** This location is near the axis of the Last Chance anticline. Carmel Formation at the surface; the Navajo Sandstone is 450 to 550 ft deep. Water level in the Carmel is unknown, but that in the Navajo may be 550 to 650 deep; thus leakage from the Carmel to the Navajo is possible. Both formation may be substantially fractured and lost circulation is possible. Also, igneous dikes and sills may be encountered. Other aquifers to be encountered at greater depths include the Wingate Sandstone and the Coconino Sandstone. Either or both of the latter may flow(?). Water in either or both of the later may be fresh to moderately saline, and thus useful, at least for stock.

Northwest of the site, on the Oilwell Bench, at least one previous oil test was converted to a water well in the Navajo SS and the well reportedly yields fresh water.

The problem here, is the reverse of the usual occurrence of shallow fresh water vs deeper, saline water. The Navajo, except for ~~xxx~~ a nearby anomaly, is a source of useful water. The overlying Carmel Fmn is a source of saline water that can ~~xxxxx~~ contaminate (or further contaminate) the Navajo.

Therefore, The surface casing should extend to the top of the Navajo.

Note: The operator may find that he will produce a large amount of water from the Navajo- particularly if he is drilling with air mist- and he may find it ~~xxx~~ necessary to case off the Navajo. The Navajo here is about 1,000 ft thick.

Lastly, please note that on abandonment or completion, plugs ~~or~~ or seals should be placed across 1) Coconino-Kaibab-~~Mxx~~ Moenkopi contacts, 2) Wingate-Chinle, 3) Wingate-Kayenta, 4) ~~Kxxxx~~ Kayenta- Nvajo, and 5) Navajo-Carmel contacts. Of course, if this test goes below the Coconino, the bottom of that unit also should receive a plug.

continue over

Signed by evaluator J. Matheny

Time used

Evaluator: Send copy to coordinator - original direct to originator of request

Oil and Gas Drilling

EA No. 204-80

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

USUAL ENVIRONMENTAL ASSESSMENT

Date February 4, 1980

Operator E. M. Davis, dba Tiger Oil Co. Well No. 14-21  
Location 550' FWL 530' FSL Section 21 Township 26S Range 7E  
County Emery State Utah Field/Unit Wildcat  
Status: Surface Ownership Public Minerals Federal  
Lease No. U-11374 Permit No. \_\_\_\_\_

Joint Field Inspection Date: January 16, 1980

Field Inspection Participants, Titles, and Organizations:

<u>George Fentress</u>	<u>Operator's Agent</u>
<u>Gene Lawson</u>	<u>Tiger Oil</u>
<u>Laurelle Hughes</u>	<u>Bureau of Land Management</u>
<u>Glenn Doyle</u>	<u>U. S. Geological Survey</u>
_____	_____
_____	_____
_____	_____

Related Environmental Documents:

Management Framework Plan, San Rafael Resource Area, Bureau of Land Management, Utah.

Prepared by: Glenn M. Doyle  
Environmental Scientist  
Grand Junction, Colorado

*Pad 300 x 300  
Pit 145 x 145  
2 7/10 mi x 1/6' new access  
Prod Loc on pad area  
Stockpile for sand  
C.P.P. 3 ac  
5 1/2 mi  
3) a) - c)*

Proposed Action:

On December 27, 1979, E. M. Davis, dba Tiger Oil Co., filed an Application for Permit to Drill the No. 14-21 exploratory well, a 4750' oil test of the Moenkopi, Sinbad and Kaibab, Toroweap, and Wolfcamp Formations, located at an elevation of 5724' in the SW/4 SW/4, Sec. 21, T26S, R7E on federal mineral lands and public surface, lease No. U-11374. There was no objection raised to the wellsite nor to the access road.

A rotary rig would be used for the drilling. An adequate casing and cementing program is proposed. Freshwater sands and other mineral-bearing formations would be protected. A Blowout Preventor would be used during the drilling of the well. The proposed pressure rating should be adequate. Details of the operator's NTL-6 10-Point Subsurface Plan are on file in the U.S.G.S. District Office in Salt Lake City, Utah, and the U.S.G.S. Northern Rocky Mountain Area Office in Casper, Wyoming. The 13-Point Surface Protection Plan is on file in the District Office in Salt Lake City, Utah.

A working agreement has been reached with the Bureau of Land Management, the controlling surface agency. Rehabilitation plans would be decided upon as the well neared completion; the Surface Management Agency would be consulted for technical expertise on those arrangements.

The operator proposes to construct a drill pad 300' wide x 300' long and a reserve pit 145' x 145'. A new access road would be constructed 16' wide x 2.5 miles long from an existing and improved road.

The operator proposes to construct production facilities on disturbed area of the proposed drill pad. If production is established, plans for a gas flowline would be submitted to the appropriate agencies for approval. The anticipated starting date is February 1980 and duration of drilling activities would be about 14 days. Minimum construction will be permitted on the access road and no fill will be permitted in the drainage. Low water crossing will be required where the access road crosses the drainage. Close cooperation with BLM is recommended.

Location and Natural Setting:

The proposed drillsite is approximately 24.8 miles north of Cainsville, Utah, the nearest town. A poor road runs to within 2.5 miles of the location. This is a wildcat well.

Topography:

The wellsite lies in a moderately gently sloping alluvial deposit which is surrounded on all sides by steep, talus-flanked mesas and narrowing canyons.

Geology:

The surface geology is Navajo sandstone. The soil is a sandy marlstone. No geologic hazards are known near the drillsite. Seismic risk for the area is minor. Anticipated geologic tops are filed with the 10-Point Subsurface Protection Plan.

Approval of the proposed action would be conditioned that adequate and sufficient electric/radioactive/density logging surveys would be made to locate and identify any potential mineral resources. Production casing and cementing would be adjusted to assure no influence of the hydrocarbon zones through the well bore on these minerals. In the event the well is abandoned, cement plugs would be placed with drilling fluid in the hole to assure protection of any mineral resources.

The potential for loss of circulation would exist. Loss of circulation may result in the lowering of the mud levels, which might permit exposed upper formations to blow out or to cause formation to slough and stick to drill pipe. A loss of circulation would result in contamination due to the introduction of drilling muds, mud chemicals, filler materials, and water deep into the permeable zone, fissures, fractures, and caverns within the formation in which fluid loss is occurring. The use of special drilling techniques, drilling muds, and lost circulation materials may be effective in controlling lost circulation.

A geologic review of the proposed action has been furnished by the Area Geologist, U. S. Geological Survey, Salt Lake City, Utah.

The operator's drilling, cementing, casing and blowout prevention programs have been reviewed by the Geological Survey engineers and determined to be adequate.

#### Soils:

No detailed soil survey has been made of the project area. The soil is subject to runoff from rainfall and has a high runoff potential and sediment production would be high. The soils are mildly to moderately alkaline and support the salt-desert shrub community.

Six inches of topsoil would be removed from the surface and stockpiled on the NW corner of the location. The soil would be spread over the surface of disturbed areas when abandoned to aid in rehabilitation of the surface. Rehabilitation is necessary to prevent erosion and encroachment of undesired species on the disturbed areas. The operator proposes to rehabilitate the location and access roads per the recommendations of the Bureau of Land Management.

Approximately three acres of land would be stripped of vegetation. This would increase the erosional potential. Proper construction practice, construction of water bars, reseeding of slope-cut area would minimize this impact.

#### Air:

No specific data on air quality is available at the proposed location. There would be a minor increase in air pollution due to emissions from rig and support traffic engines. Particulate matter would increase due to dust from travel over unpaved dirt roads. The potential for increased air pollution due to leaks, spills, and fire would be possible.

Relatively heavy traffic would be anticipated during the drilling-operations phase, increasing dust levels and exhaust pollutants in the area. If the well

was to be completed for production, traffic would be reduced substantially to a maintenance schedule with a corresponding decrease of dust levels and exhaust pollutants to minor levels. If the project results in a dry hole, all operations and impact from vehicular traffic would cease after abandonment. Due to the limited number of service vehicles and limited time span of their operation, the air quality would not be substantially reduced.

Toxic or noxious gases would not be anticipated. However, if  $H_2S$  or any other toxic substances are encountered, the USGS is to be notified immediately.

Additionally, the Capitol Reef National Park boundary lies approximately 5.5 miles west of the site. The Park has been designated as a Class I attainment area. The wellsite lies within a Class II attainment area. The winds blow predominantly SW to NE, so the impacts on the Park should be nil.

#### Precipitation:

Annual rainfall should range from about 8 to 11" at the proposed location. The majority of the numerous drainages in the surrounding area are of a nonperennial nature flowing only during early spring runoff and during extremely heavy rainstorms. This type of storm is rather uncommon as the annual precipitation is around 8".

Winds are medium and gusty, occurring predominantly from SW to NE. Air mass inversions are rare. The climate is semiarid with abundant sunshine, hot summers and cold winters with temperature variations on a daily and seasonal basis.

#### Surface Water Hydrology:

Small, intermittent drainages cross the wellsite and empty into the main canyon channel to the west. The access road crisscrosses the main drainage in several places. Flows in this channel are nonperennial.

Some additional erosion would be expected in the area since surface vegetation would be removed. If erosion became serious, drainage systems such as water bars and dikes would be installed to minimize the problem. The proposed project should have minor impact on the surface water systems. The potentials for pollution would be present from leaks or spills. The operator is required to report and clean up all spills or leaks.

#### Groundwater Hydrology:

Some minor pollution of groundwater systems would occur with the introduction of drilling fluids (filtrate) into the aquifer. This is normal and unavoidable during rotary drilling operations. The potential for communication, contamination, and commingling of formations via the well bore would be possible. The drilling program is designed to prevent this. There is need for more data on hydrologic systems in the area and the drilling of this well may provide some basic information as all shows of fresh water would be reported. Water production with the gas would require disposal of produced water per the requirements of NTL-2B. The depths of freshwater formations are listed in the 10-Point Subsurface Protection Plan. The pits would be unlined. If fresh water should be available from the well, the owner or surface agency may request completion as a water well if given approval.

According to WRD, interaquifer leakage and lost circulation could occur between the following formations: Carmel to Navajo. Aquifers with expected freshwater content: Wingate and Coconino Sandstones. Therefore, surface casing should extend to the top of the Navajo. On abandonment or completion, plugs or seals should be placed across the following contacts: 1) Coconino-Kaibab-Moenkopi, 2) Wingate-Chinle, 3) Wingate-Kayenta, 4) Kayenta-Navajo, and 5) Navajo-Carmel.

#### Vegetation:

Vegetation in the area includes sagebrush, fourwing saltbush, shadscale, winterfat, and Indian ricegrass.

Proposed action would remove about three acres of vegetation. Removal of vegetation would increase the erosional potential and there would be a minor decrease in the amount of vegetation available for grazing.

The operator proposes to rehabilitate the surface upon completion of operations. Rehabilitation would be in accordance with BLM recommendations.

#### Wildlife:

Animal and plant inventory has been made by the BLM. No endangered plants or animals are known to inhabit the project area. The fauna of the area consists predominantly of mule deer, coyotes, rabbits, foxes, and varieties of small ground squirrels and other types of rodents and various types of reptiles. The area is used by man for the primary purpose of grazing domestic livestock and sheep. The birds of the area are raptors, finches, ground sparrows, magpies, crows, and jays.

#### Social-Economic Effect:

An on the ground surface archaeological reconnaissance would be required prior to approval of the proposed action. Appropriate clearances would then be obtained from the surface managing agency. If a historic artifact, an archaeological feature or site is discovered during construction operations, activity would cease until the extent, the scientific importance, and the method of mitigating the adverse effects could be determined by a qualified cultural resource specialist.

There are no occupied dwellings or other facilities of this nature in the general area. Minor distractions from aesthetics would occur over the lifetime of the project. All permanent facilities placed on the location would be painted a color to blend in with the natural environment. Present use of the area is grazing, recreation, and oil and gas activities.

Noise from the drilling operation may temporarily disturb wildlife and people in the area. Noise levels would be moderately high during drilling and completion operations. Upon completion, noise levels would be infrequent and significantly less. If the area is abandoned, noise levels should return to pre-drilling levels.

The site is not visible from any major roads.

The overall effect of oil and gas drilling and production activity is significant in Emery County but it is difficult to assess the environmental impact of a single well on state and/or national levels. However, if said well was to produce in sufficient quantity, additional development wells might be anticipated. This additional development, in turn, would lead to greater environmental and socioeconomic consequences.

Should the wellsite be abandoned, surface rehabilitation would be done according to the surface agency's requirements and to USGS's satisfaction. This would involve leveling, contouring, reseeding, etc., of the location and possibly the access road. If the well should produce hydrocarbons, measures would be undertaken to protect wildlife and domestic stock from the production equipment.

Capitol Reef National Park lies approximately 5.5 miles west of the location. There are no other national, state, or local parks, forests, wildlife refuges or ranges, grasslands, monuments, trails, or other formally designated recreational facilities near the proposed location.

The proposed location is within the San Rafael Resource Area Management Framework Planning Unit. This Environmental Assessment Record was compiled by the Bureau of Land Management, the surface managing agency of the Federal surface in the area. The study includes additional information on the environmental impact of oil and gas operations in this area and gives land use recommendations. The E.A.R. is on file in the agency's State offices and is incorporated herein by reference.

#### Waste Disposal:

The mud and reserves pits would contain all fluids used during the drilling operations. No burning of trash is allowed. Trash would be contained in a trash bin and hauled to an approved dump site. Sewage would be handled according to State sanitary codes. For further information, see the 13-Point Surface Plan.

#### Controversial Issues:

The wellsite lies in an area formerly designated by the BLM as a Wilderness Study Area. The area was dropped from consideration. An appeal to this decision has been filed through the courts by an interest group to repeal or amend it. However, BLM has determined that the lease in question meets the requirements for operations under the "grandfathered use" section of BLM's "Interim Management Policy and Guidelines for Lands Under Wilderness Review." This means that the drilling operations can be allowed under existing environmental procedures and legislation.

#### Alternatives to the Proposed Action:

1) Not Approving the Proposed Permit--The Oil and Gas Lease grants the lessee exclusive right to drill for, mine, extract, remove and dispose of all oil and gas deposits. Under leasing provisions, the Geological Survey has an obligation to allow mineral development if the environmental consequences are not too severe or irreversible. Upon rehabilitation of the site, the environmental effects of this action would be substantially mitigated, if not

totally annulled. Permanent damage to the surface and subsurface would be prevented as much as possible under U.S.G.S. and other controlling agencies' supervision with rehabilitation planning reversing almost all effects. Additionally, the growing scarcity of oil and gas should be taken into consideration.

2) Minor relocation of the wellsite and access road or any special, restrictive stipulations or modifications to the proposed program would not significantly reduce the environmental impact. There are no severe vegetative, animal or archaeological-historical-cultural conflicts at the site. Since only a minor impact on the environment would be expected, the alternative of moving the location is rejected. At abandonment, normal rehabilitation of the area such as contouring, reseeding, etc., would be undertaken with an eventual return to the present status as outlined in the 13-Point Surface Plan.

3) Drilling should be permitted, provided the following mitigative measures are incorporated into the APD and adhered to by the operator:

a) Operator will use a trash bin to contain trash. No burning of trash will be allowed.

b) Operator will maintain blooie line at least 125' away from the wellhead and direct it into the blooie pit. Also, the blooie pit will be moved approximately 110' west of the proposed pit location to mitigate the effects of wind blowing directly into the "blown-out" material.

c) Operator will stockpile six inches of topsoil on the NW corner of the pad.

Adverse Environmental Effects Which Cannot Be Avoided:

Surface disturbance and removal of vegetation from approximately three acres of land surface for the lifetime of the project which would result in increased and accelerated erosional potential. Grazing would be eliminated in the disturbed areas and there would be a minor and temporary disturbance of wildlife and livestock. Minor induced air pollution due to exhaust emissions from rig engines of support traffic engines would occur. Minor increase in dust pollution would occur due to vehicular traffic associated with the operation. If the well is a gas producer, additional surface disturbance would be required to install production pipelines. The potential for fires, leaks, spills of gas, oil or water would exist. During the construction and drilling phases of the project, noise levels would increase. Potential for subsurface damage to freshwater aquifers and other geologic formations exists. Minor distractions from aesthetics during the lifetime of the project would exist. If the well is a producer, an irreplaceable and irretrievable commitment of resources would be made. Erosion from the site would eventually be carried as sediment in the Fremont River. The potential for pollution to Salvation Creek would exist through leaks and spills.

If well is a producer, other development wells would be anticipated with substantially greater environmental and economic impacts.

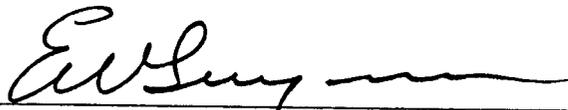
We have considered the proposed action in the preceding pages of this EA and find, based on the analysis of environmental considerations provided therein, no evidence to indicate that it will significantly (40 CFR 1508.27) impact the quality of the human environment.

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, Sec. 102(2)(C).

FEB 11 1980

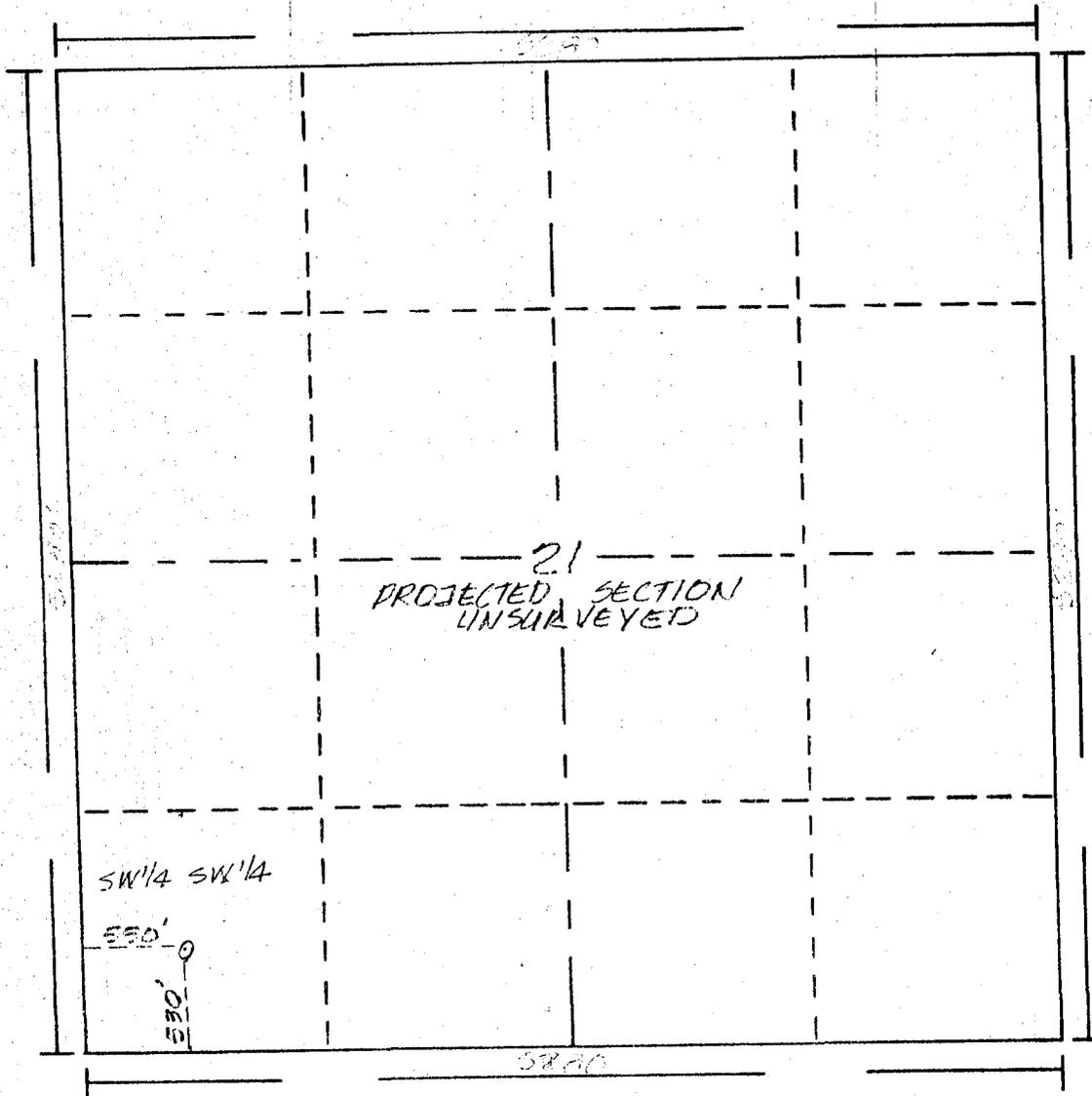
Date



District Engineer  
U. S. Geological Survey  
Conservation Division  
Oil and Gas Operations  
Salt Lake City District



R. 7E.



Scale... 1" = 1000'

**Powers Elevation of Denver, Colorado**  
 has in accordance with a request from *GEO. FENTRESS*  
 for *E.M. DAVIS dba TIGER OIL CO.*  
 determined the location of *14-21 FEDERAL*  
 to be *530' FSL, & 550' FNL* Section 21 Township 26S.,  
 Range 7 EAST, SALT LAKE BASE 2 Meridian  
*EMERY* County, UTAH

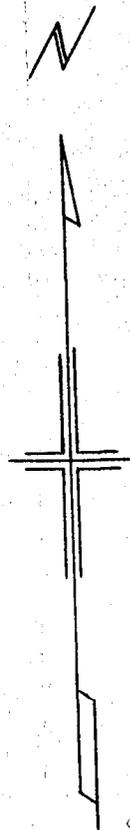
I hereby certify that this plat is an  
 accurate representation of a correct  
 survey showing the location of

Date: 12-6-79

*Kerry N. Becker*  
 Licensed Land Surveyor No. 4189  
 State of UTAH

TOPOGRAPHIC MAP

N. 200' R.P.  
5737.7



E. 200' R.P.  
5728' 0

Scale: 1" = 50'

EL. 5724  
Well site = CO. 0

W. 200'  
R.P.  
5725'

WELL NO. 14-21 FEDERAL  
SW 1/4 SW 1/4, SEC. 21, T. 26S. R. 7E.  
EMERY COUNTY, UTAH

5714.6  
5,200' R.P.

by: *[Signature]*  
Powers Elevation Company, Inc.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE\*  
(Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 42-R1424.

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 "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
Edward Mike Davis dba Tiger Oil Company

3. ADDRESS OF OPERATOR  
5 Greenway Plaza East, Suite 1500, Houston, TX 77046

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface  
  
550' FWL 530' FSL (SW SW)

14. PERMIT NO. \_\_\_\_\_ 15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
5724 GR

5. LEASE DESIGNATION AND SERIAL NO.  
U-11374

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Federal

9. WELL NO.  
14-21

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 21-T26S-R7E

12. COUNTY OR PARISH  
Emery

13. STATE  
Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	(Other) _____
(Other) _____			(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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.)\*

Moved in and rigged up Benco Rathole Drillers on March 27, 1980. Spudded in at 8:00 a.m. March 28, 1980. Drilled a 30" hole to 17' and hit extremely hard formation. Moved out Benco and immediately moved in Zimmerman Well Service Company with air drilling equipment. With continuous everyday operations drilled a 6" hole to the prescribed 90', reamed 6" to 9-3/4"; reamed 9-3/4" to 17"; and reamed 17" to 24" hole to 90'. Ran 18" o.d. pipe to 90' and cemented the casing from 90' to the surface with approximately 4 yards ready mix cement. Cement was in place at 4:30 p.m. on April 10, 1980. Will now wait for drilling rig to drill to the original proposed depth.

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

SIGNED E. W. Gynn TITLE Chief Engineer DATE 3-15-80

(This space for Federal or State office use)

APPROVED BY RA Nassiri FOR E. W. GYNN DISTRICT ENGINEER DATE APR 24 1980

CONDITIONS OF APPROVAL, IF ANY:

ACCEPTED

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R1424.

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 "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-11374
2. NAME OF OPERATOR Edward Mike Davis dba Tiger Oil Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR Five Greenway Plz. #1500 Houston, Texas 77046		7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 550' FWL 530' FSL (SW SW)		8. FARM OR LEASE NAME Federal
14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.) 5724 GR	9. WELL NO. 14-21
		10. FIELD AND POOL, OR WILDCAT Wildcat
		11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA Sec 21 T26S R7E
		12. COUNTY OR PARISH Emery
		13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input checked="" type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	
(Other) <input type="checkbox"/>			

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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.)\*

By 1/2/81 the following work will be conducted.

1. Fill conductor casing from TD of 90' to ground level with soil and 10 sack cement cap at surface.
2. Restore location in accordance with BLM requirements.

*Dry Hole marker is waived.*

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

SIGNED E. W. Gwynn TITLE Engineer DATE 12/3/80

(This space for Federal or State office use)

APPROVED BY E. W. Gwynn FOR E. W. GUYNN TITLE DISTRICT ENGINEER DATE DEC 11 1980

CONDITIONS OF APPROVAL, IF ANY

*DOPE*

July 10, 1981

Tiger Oil Company  
Suite 1500 Five Greenway Plaza East  
Houston, Texas 77046

Re: See Attached Sheet

Gentlemen:

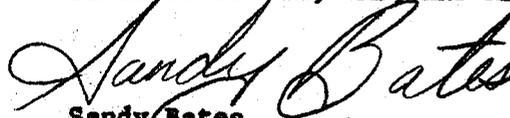
In reference to above mentioned wells, considerable time has gone by since approval was obtained from this office.

This office has not received any notification of spudding. If you do not intend to drill these wells, please notify this Division. If spudding or any other activity has taken place, please send necessary forms.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING



Sandy Bates  
Clerk-Typist

/lm  
Attachment

1. Well No. Federal 14-21  
Sec. 21, T. 26S, R. 7E  
Emery County, Utah
2. Well No. Federal 14-9  
Sec. 9, T. 26S, R. 7E  
Emery County, Utah
3. Well No. Federal 12-27  
Sec. 27, T. 26S, R. 7E  
Emery County, Utah

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPlicate\*  
(Other instructions on re-  
verse side)

*bill p/r*

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.  
U-11374

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

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 "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
Edward Mike Davis dba Tiger Oil Company

3. ADDRESS OF OPERATOR  
Suite 1500; 5 Greenway Plaza East, Houston, Texas 77046

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface

550' FWL 530' FSL (SW SW)

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Federal

9. WELL NO.  
14-21

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec 21, T26S, R7E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

5724 GR

12. COUNTY OR PARISH 13. STATE  
Emery Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data:

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

FULL OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREAT

MULTIPLE COMPLETE

FRACTURE TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON\*

SHOOTING OR ACIDIZING

ABANDONMENT\*

REPAIR WELL

CHANGE PLANS

(Other)

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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.)\*

*PcA* This location was not drilled except for setting a conductor pipe at surface; On 2-1-81 the following work was conducted to abandon the location:

1. Fill conductor casing from TD of 90' to ground level with soil and 10 sack cement cap at surface.
2. Restored location in accordance with BLM requirements.

RECEIVED  
FEB 08 1982  
DIVISION OF OIL, GAS & MINING

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

SIGNED

*E. W. Guynn*

TITLE

Engineer

DATE

7-29-81

(This space for Federal or State office use)

APPROVED BY

*J. M. ...*

TITLE

E. W. Guynn  
District Oil & Gas Supervisor

DATE

FEB 5 1982

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

UTAH STATE O & G