

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  
 Palmer Oil & Gas Company - ENERGY INCREMENTS Inc.

3. ADDRESS OF OPERATOR  
 P. O. Box 2564, Billings, Montana 59103

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface  
 682' FSL, 2130' FEL  
 At proposed prod. zone  
 Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 Approximately 35 miles Northwest of Mack, Colorado

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)  
 682'

16. NO. OF ACRES IN LEASE  
 640

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 320

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

19. PROPOSED DEPTH  
 7113' Morrison

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 7382' G.L., 7393' K.B.

22. APPROX. DATE WORK WILL START\*  
 September 25, 1979

5. LEASE DESIGNATION AND SERIAL NO.  
 USA U37847

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
 Federal

9. WELL NO.  
 Federal #29-15

10. FIELD AND POOL, OR WILDCAT  
 Westwater

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA  
 29-16S-24E

12. COUNTY OR PARISH  
 Grand

13. STATE  
 Utah

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/2"	9 5/8" new	K-55 36#	120'	150 sacks
7 7/8"	7" new	K-55 20#	2643'	150 sacks
6 1/4"	4 1/2" new	K-55 10.5# & 11.6#	7113	225 sacks

- Surface formation is the Mesaverde.
- Anticipated geologic markers are: Castlegate-2793, Frontier-6083, Dakota-6463, Morrison-6663
- Gas is anticipated in the Dakota and Morrison. No water, oil, or other minerals are anticipated.
- Proposed casing program: See item No. 23 above.
- Pressure control equipment: See attached well control plan and schematic of drilling contractors BOP stack. BOP's will be tested before drilling out from under surface casing and will be checked daily.
- Air or mist drilling will be used to drill the surface hole unless water is encountered. If water is encountered approximately 300 bbls. of gel type mud will be used. The well will be air drilled from under surface casing to T.D.
- Auxiliary Equipment: See well control plan.
- The logging program will consist of an IES log from TD to the base of intermediate casing, and GR-FDC-SNP or CNL logs from TD to above the Frontier. No cores or DST's are planned.

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 James G. Routson TITLE Petroleum Engineer DATE June 1, 1979  
 (This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE AUG 30 1979  
(Orig. Sd.) R. A. Henricks ACTING DISTRICT ENGINEER DATE

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

NECESSARY FLARING OF GAS DURING DRILLING AND COMPLETION APPROVED SUBJECT TO ROYALTY (NTL-4)

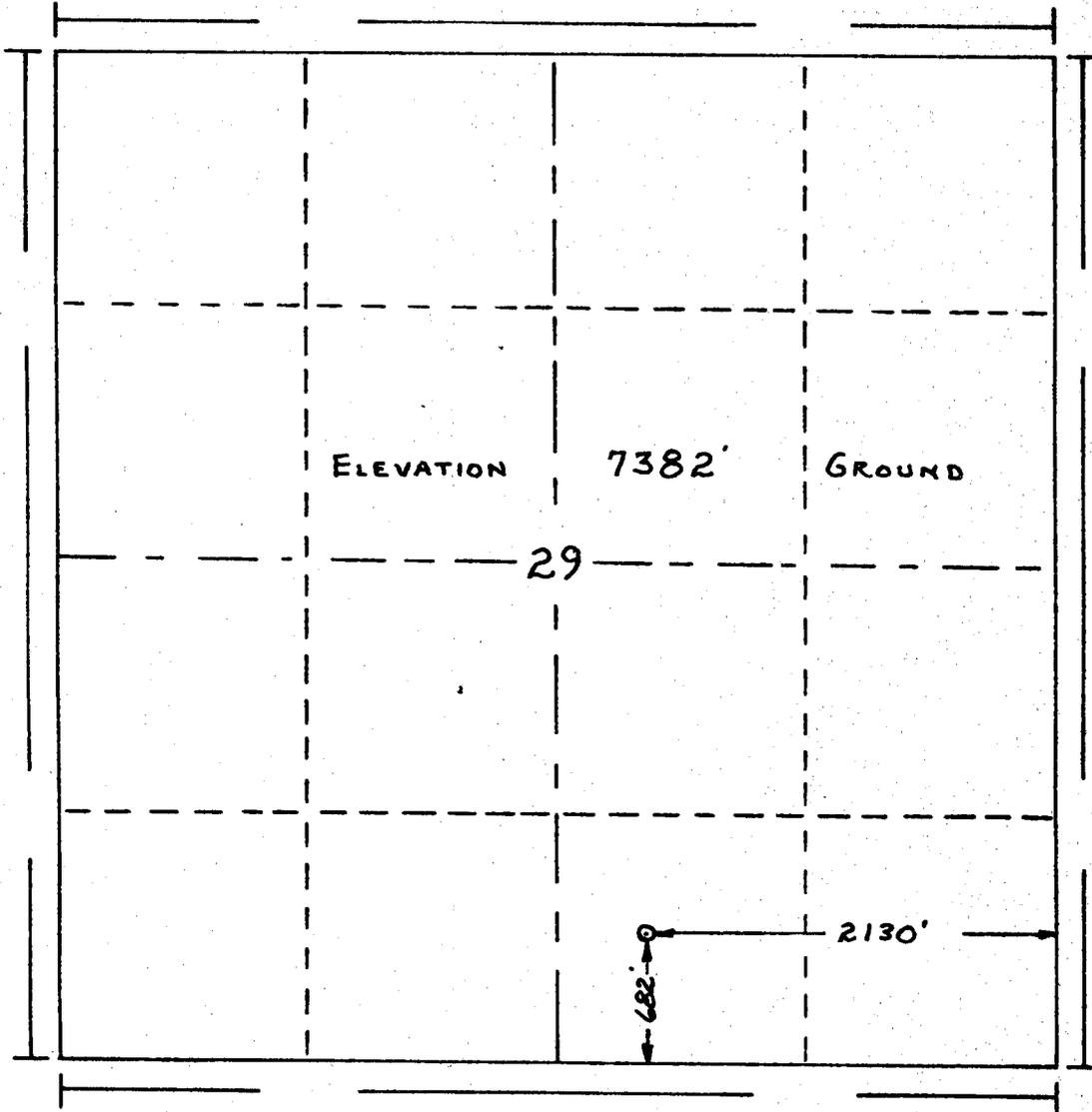
STATE O&G UT

APPLICATION FOR PERMIT TO DRILL (Con't)

9. No abnormal pressures or temperatures anticipated. No poisonous gas anticipated.
10. Anticipated spud date is September 25, 1979, depending on rig availability. Completion operations should commence within 30 days of rig release.
11. Survey plats enclosed.
12. The gas is dedicated to Southwest Gas Corporation.
13. The spacing unit is the South half of Section 29, containing 320 acres.
14. Designation of Operator forms enclosed.



R. 24 E.



T.  
16  
S.

Scale... 1" = 1000'

Powers Elevation Company, Inc. of Denver, Colorado  
 has in accordance with a request from JIM ROUTSON  
 for PALMER OIL AND GAS COMPANY  
 determined the location of #29-15 SOUTHWEST FEDERAL  
 to be 682' FS & 2130' FE Section 29 Township 16 S.  
 Range 24 E. OF THE SALT LAKE Meridian  
 GRAND County, UTAH

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

\*29-15 SOUTHWEST FEDERAL

Date: 5-22-79

J. Nelson  
 Licensed Land Surveyor No. 2711  
 State of UTAH

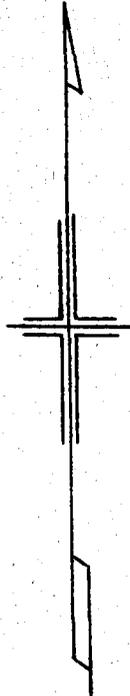
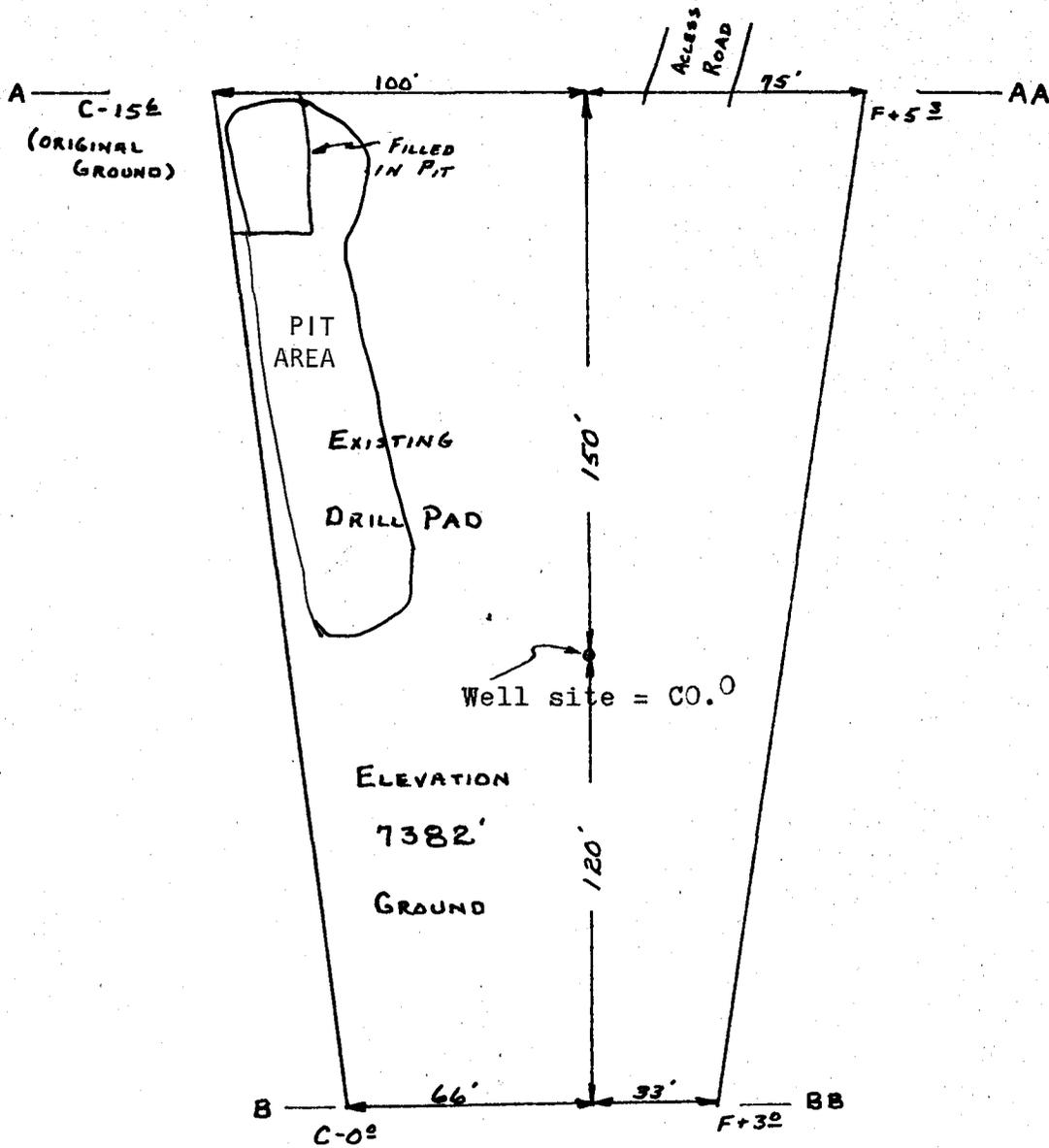
TOPOGRAPHIC MAP -- PLAT NO. 2

PALMER OIL & GAS CO.

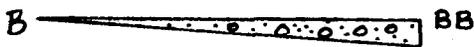
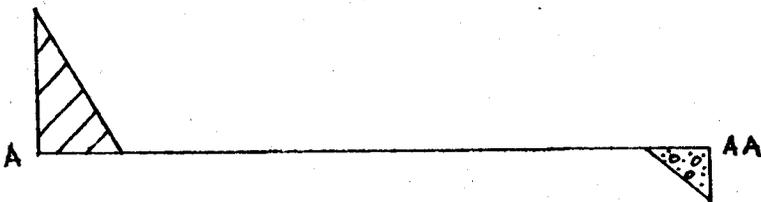
# 29-15 SOUTHWEST FEDERAL

682' FS & 2130' FE SEC. 29 T16S R24E

GRAND COUNTY, UTAH



Scale: 1" = 50'



1" = 20'  
1" = 50'

CROSS SECTIONS

by: Richard A. Schulte  
Powers Elevation Company, Inc.

5-22-79

United States Department of the Interior  
Geological Survey  
8440 Federal Building  
Salt Lake City, Utah 84138

Usual Environmental Analysis

Lease No. U-37847  
Operator Palmer Oil & Gas, Energy Increments Well No. 29-15  
Location 682' FSL 2130' FEL Sec. 29 T. 16S R. 24E  
County Grand State Utah Field Westwater  
Status: Surface Ownership Public Minerals Federal  
Joint Field Inspection Date July 19, 1979

Participants and Organizations:

<u>Harry Quinn</u>	<u>Tenneco Oil</u>
<u>Steven Dunn</u>	<u>Tenneco Oil</u>
<u>Bob Ballentyne</u>	<u>Palmer Oil &amp; Gas</u>
<u>Bill Buniger</u>	<u>Dirt Contractor</u>
<u>Rocky Curnutt</u>	<u>Bureau of Land Management</u>
<u>John Evans</u>	<u>U. S. Geological Survey</u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>

Related Environmental Analyses and References:

- (1) Book Mountain Unit Resource Analysis, Bureau of Land Management, Utah
- (2)

Analysis Prepared by: John T. Evans, Environmental Scientist  
Grand Junction

Date July 23, 1979

NOTED JOHN T. EVANS, JR.

7-24-79

*Drlg Act. Limited before 12/1 & after 2/15*  
*Pod 100 x 2 m*  
*Flow line*  
*Upgrade exist*  
*On site drill pad*  
*Shut-in 2 uc*  
*Mitigation Pg 6*  
*3) Narrative*

Proposed Action:

On June 4, 1979, Palmer Oil and Gas and Energy Increments, Inc., filed an Application for Permit to Drill the No. 29-15 exploratory well, a 7113' gas test of the Dakota and Morrison Formations; located at an elevation of 7382' in the SW/4 SE/4, Sec. 29, T16S, R24E, on Federal mineral lands and Public surface; lease No. U-37847. There was no objection raised to the wellsite nor to the access road. Portions of existing access road has pitch grades 12-18% and it is estimated average grade exceeds 8%. Because of the steep grades, it was agreed there would be no drilling or completion activity after December 1 nor before February 15. It was also agreed that the permitting agencies would expedite approval as a summer-fall drilling program would be more desirable than a spring operation.

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 is 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 100'+ wide x 200' long and a reserve pit 50' x 100'. An existing trail would be upgraded from a maintained 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 August 1979 and duration of drilling activities would be about 30 days.

Location and Natural Setting:

The proposed drillsite is approximately 35 miles NW of Mack, Colorado, the nearest town. A poor road runs to the location. This well is in the Westwater Field.

Topography:

The proposed location is located on an old drill pad. An existing cut would be terraced to facilitate rehabilitation. The proposed location is on a ridge. The well site is on a steep north slope and drainage is to the south in valley bottom.

Geology:

The surface geology is Mesa Verde. The soil is sandy clays and gravels. 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 and is possible in the sandstone units of the Mesa Verde. 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 topsoils in the area range from a sandy clay to a clay type soil. 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.

Topsoil would be removed from the surface and stockpiled. 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 two 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. Dust from air drilling would be controlled by operator.

Precipitation:

Annual rainfall should range from about 15 to 20" at the proposed location. The majority of the numerous drainages in the surrounding area are of a non-perennial nature flowing only during early spring runoff and during extremely heavy rainstorms.

Winds are medium and gusty, occurring predominantly from west to east. The climate is semiarid with abundant sunshine, hot summers and cold winters with temperature variations on a daily and seasonal basis.

Surface Water Hydrology:

Drainage is to the north to valley bottom which drains to the south.

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.

#### Vegetation:

Plants in the area are pinyon-juniper, sagebrush, scrub oak grading to Douglas Fir on north-facing slopes.

Proposed action would remove about two 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. New impacts would be minimal as existing disturbed areas would be utilized for 95% of the proposed action.

The operator proposes to rehabilitate the surface upon completion of operations.

#### 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 and are judged to be minor. 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 Grand 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.

There are no 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 Book Mountain 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. A trash pit would be utilized for any solid wastes generated at the site and would be buried at the completion of the operations. Sewage would be handled according to State sanitary codes. For further information, see the 13-Point Surface Plan.

#### 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 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 allowed provided the following mitigative measures are incorporated into the proposed APD and adhered to by the operator.

Because the access road exceeds 8% and utilization during snowy or muddy conditions would be hazardous, drilling activity would not be permitted December 1 through February 15. Controlling agency would expedite approvals as a summer/fall drilling period is preferred rather than spring activity.

North arrow on layout plat is 180° out of phase.

Reserve pit to be fenced on three sides prior to drilling and remaining side fenced on rig release.

Adverse Environmental Effects Which Cannot Be Avoided:

Surface disturbance and removal of vegetation from approximately two 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 Colorado River. The potential for pollution would exist through leaks and spills.

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

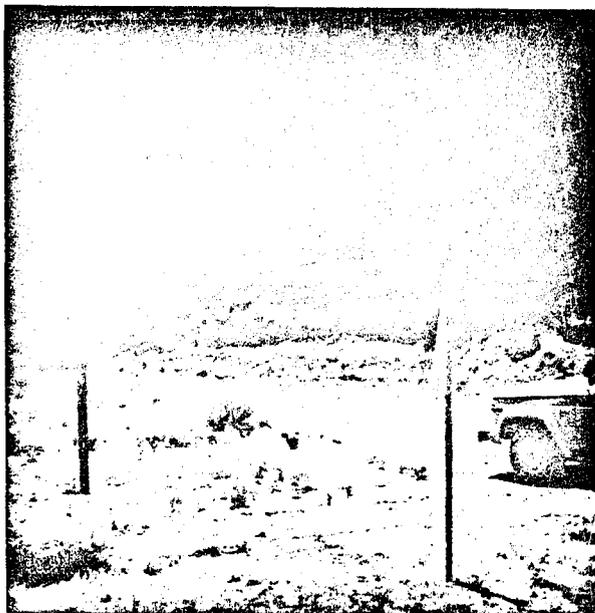
Determination:

This requested action does not constitute a major Federal action significantly affecting the environment in the sense of NEPA, Sec. 102(2)(C).

Date

8/10/79

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



TWELVE POINT PLAN OF DEVELOPMENT  
FOR SURFACE USE FOR PALMER OIL FEDERAL #29-15  
SW $\frac{1}{4}$ SE $\frac{1}{4}$  Section 29-T16S-R24E  
Grand County, Utah

1. Existing roads

- A. Proposed wellsite: Survey plat enclosed.
- B. Location is approximately 10 miles North of Highway 6 & 50 on the East Canyon Road and 8 miles up an existing lease road in the Bryson Canyon Field.
- C. Access roads: See Location Map #1.
- D. Not applicable, well is not exploratory.
- E. Existing roads within 1 mile of wellsite: See Location Map #1.
- F. No improvements of existing roads are planned.

2. Planned access roads

- A. The location is an old location with an existing access road, so no additional access road is required.

3. Location of existing wells (See Map No. 2)

- 1. There are no existing water wells within a 1 mile radius.
- 2. See Map #2 for location of abandoned wells.
- 3. No temporary abandoned wells are located within a 1 mile radius.
- 4. No disposal wells in the area.
- 5. No drilling wells in the area, locations shown on Map No. 2.
- 6. Producing wells shown on Map No. 2.
- 7. Shut-in wells shown on Map No. 2.
- 8. No injection wells in the area.
- 9. No monitoring or observation wells in the area.

4. Location of existing and proposed production facilities

- A.
  - 1. No tank batteries within a 1 mile radius.
  - 2. Production facilities within a 1 mile radius include separators and meter runs at the gas wells shown on Map No. 2.
  - 3. No oil gathering lines in the area.
  - 4. A field gathering system generally follows the roads shown on Map No. 1. The closest major pipeline is the Mesa Pipeline in East Canyon.
  - 5. No injection lines in the area.
  - 6. No disposal lines in the area.
- B.
  - 1. The gathering system has not yet been designed.
  - 2. A separator, approximately 5' x 10', and a meter run, approximately 6' x 8', will be on the drillsite pad, and will be painted to blend with the desert environment.
  - 3. No construction materials are necessary. All lines will be coated, wrapped, and buried.
  - 4. A 10' x 10' water disposal pit will be dug within 50' of the separator and will be enclosed by a wire fence. A 6' x 6' x 3 $\frac{1}{2}$ ' metal guard will be placed around the wellhead.
- C. Plans for restoration of the surface.  
On completion of the drilling of this well, all pits will be backfilled and top-soil replaced and re-contoured back to the original terrain. Upon abandonment all disturbed area, including the location and access road, will be re-contoured, ripped or scarified as needed, and re-vegetated using a seed formula as specified by the BLM. All seeding will be done between September 15 and November 15.

5. Location and type of water supply

- A. Very little water is needed to drill this well because it will be air drilled. Water will be hauled from a water hole in the Westwater drainage. If this is dry, it will be hauled from West Salt Creek drain ditch near Mack, Colorado.
- B. Water will be transported by truck. The truck will use the access road.
- C. No water well is to be drilled.

6. Source of construction materials

- A. No construction materials are to be used.

TWELVE POINT PLAN OF DEVELOPMENT (Con't)

7. Methods for handling waste disposal

1. Cuttings will be buried 3' under top-soil.
2. Drilling fluids (if any) will be left in open pit to evaporate. Pit will be fenced on 4 sides during drilling and completion operations.
3. Produced oil or condensate (if any) will be stored in a tank and sold. Produced water will be disposed of in compliance with rules and regulations of the USGS and the State of Utah.
4. Portable chemical toilet will be provided.
5. Trash will be burned in burn pit. The burn pit will be fenced with expanded metal. Noncombustible trash will be buried at least 4' deep in the reserve pit.
6. Drilling fluid in pit, which will be very minimal due to air drilling, will be left to dry, if necessary. After pit area is sufficiently dry, cuttings will be pushed into pit and sub-soil will be placed on top of any remaining fluid and cuttings; then top-soil will be used to cover both pit and location area. The area will be policed for all trash when the well is completed and the location will be left as much like the natural environment as possible.

8. Ancillary facilities

No camps or airstrips proposed.

9. Wellsite layout

1. See Plat No. 2 showing location pad. All necessary cuts and fills are shown on this plat, and two cross sections are shown on the bottom of the plat.
2. Location of pits, etc.: See plan of drillsite layout diagram, Plat #2-A.
3. Rig orientation: See plan of drillsite layout diagram, Plat #2-A.
4. Pits will be unlined.

10. Plans for restoration of surface

1. Backfilling, leveling, etc.: See 7-1 and 4-C.
2. Rehabilitation, etc.: See 4-C.
3. Fencing of pits: Pit will be fenced on all sides during drilling and completion operations.
4. Oil on pits: Occurance is improbable. If it does occur, the pits will be flagged to prevent an influx of wild fowl. Any oil which does occur will be trucked off for disposal.
5. Rehabilitation timetable: See 4-C. Contouring will be done as soon as the pits are dry. Barring any unforeseen problems, rehabilitation should be completed within 90 days of completing the well.

11. Other information

1. Topography: Immediate wellsite is in the Book Cliffs. The Book Cliffs and deep canyons surround the location.  
Soil: Eroded Mesaverde and Blow Sand.  
Vegetation: Sparse grassland with greasewood, sagebrush, junipers, and Pinion Pine. Land is used for grazing.  
Fauna: Occasional use by deer, antelope, rabbits, lizards, hawks, and miscellaneous small birds.  
Geologic features: Nothing significant in immediate area.
2. A. Surface Ownership: Public lands administered by the BLM.  
B. Surface Activities: Rabbit and bird hunting, sheep and cattle grazing, and gas well maintenance.
3. No water or dwellings are on the lease. An archaeological study will be done by Powers Elevation Company of Eagle, Colorado.

TWELVE POINT PLAN OF DEVELOPMENT (Con't)

12. Lessee's or operator's representative

J. G. Routson  
P. O. Box 2564  
Billings, Montana 59103

Office Phone (406) 248-3151  
Home Phone (406) 245-8797  
Mobile Phone (303) 245-3660 Unit #327

R. D. Ballantyne  
P. O. Box 2564  
Billings, Montana 59103

Office Phone (406) 248-3151  
Home Phone (406) 656-1304  
Mobile Phone (303) 245-3660 Unit #327

William H. Buniger  
P. O. Box 42  
Loma, Colorado 81524

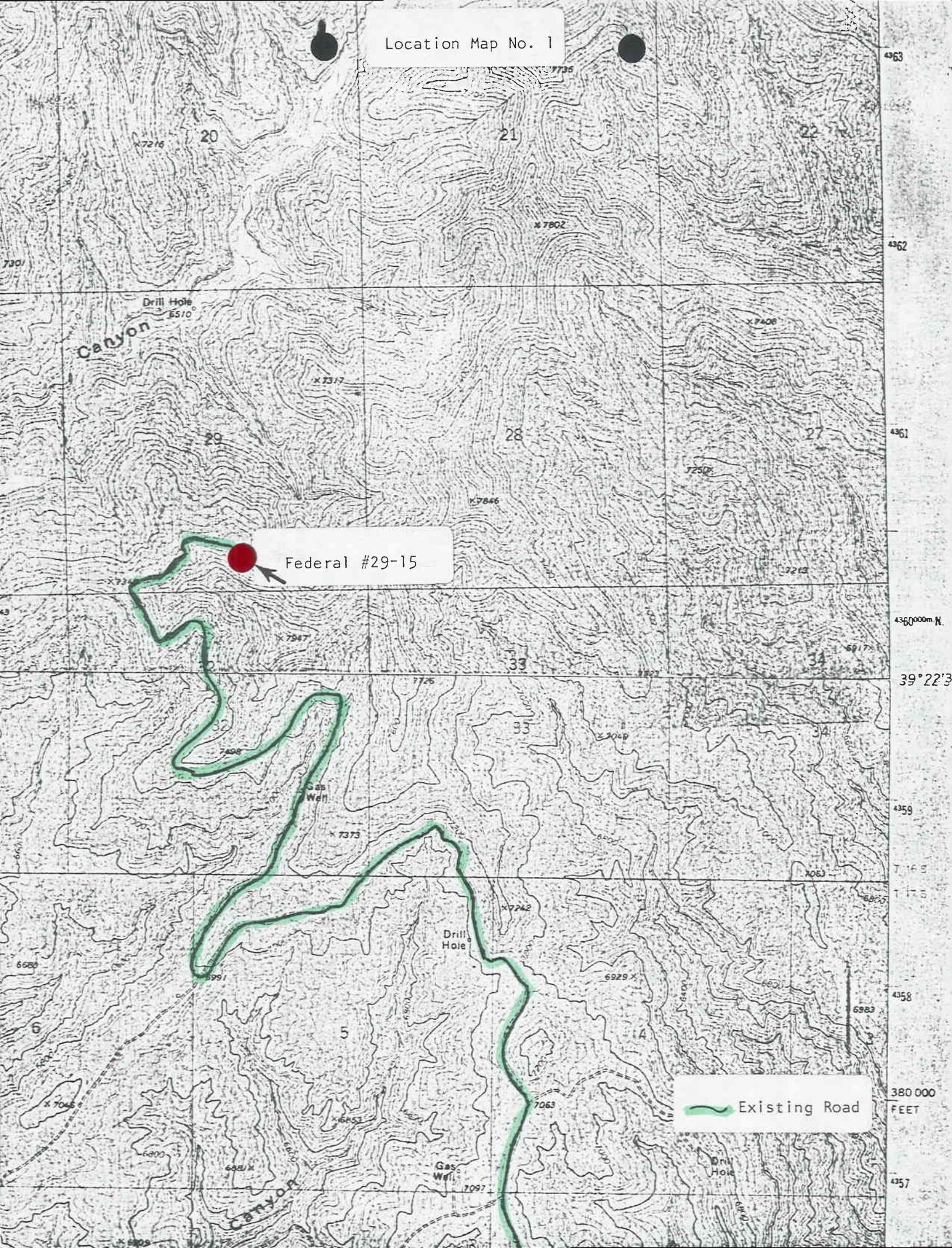
Home Phone (303) 858-7377  
Mobile Phone (303) 245-3660 Unit #289

13. I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Palmer Oil & Gas Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

Date: June 1, 1979

James G. Routson  
James G. Routson  
Petroleum Engineer

Location Map No. 1



Federal #29-15

Existing Road

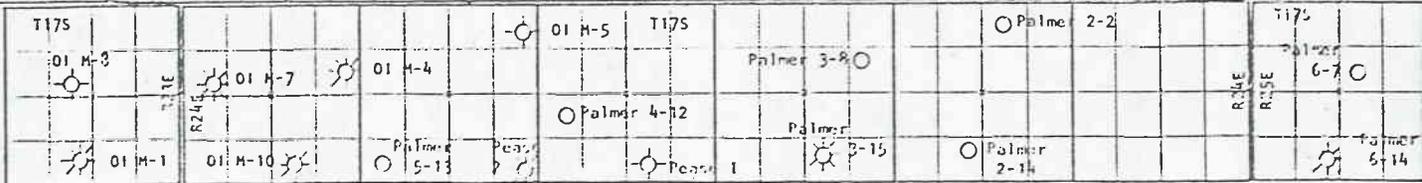
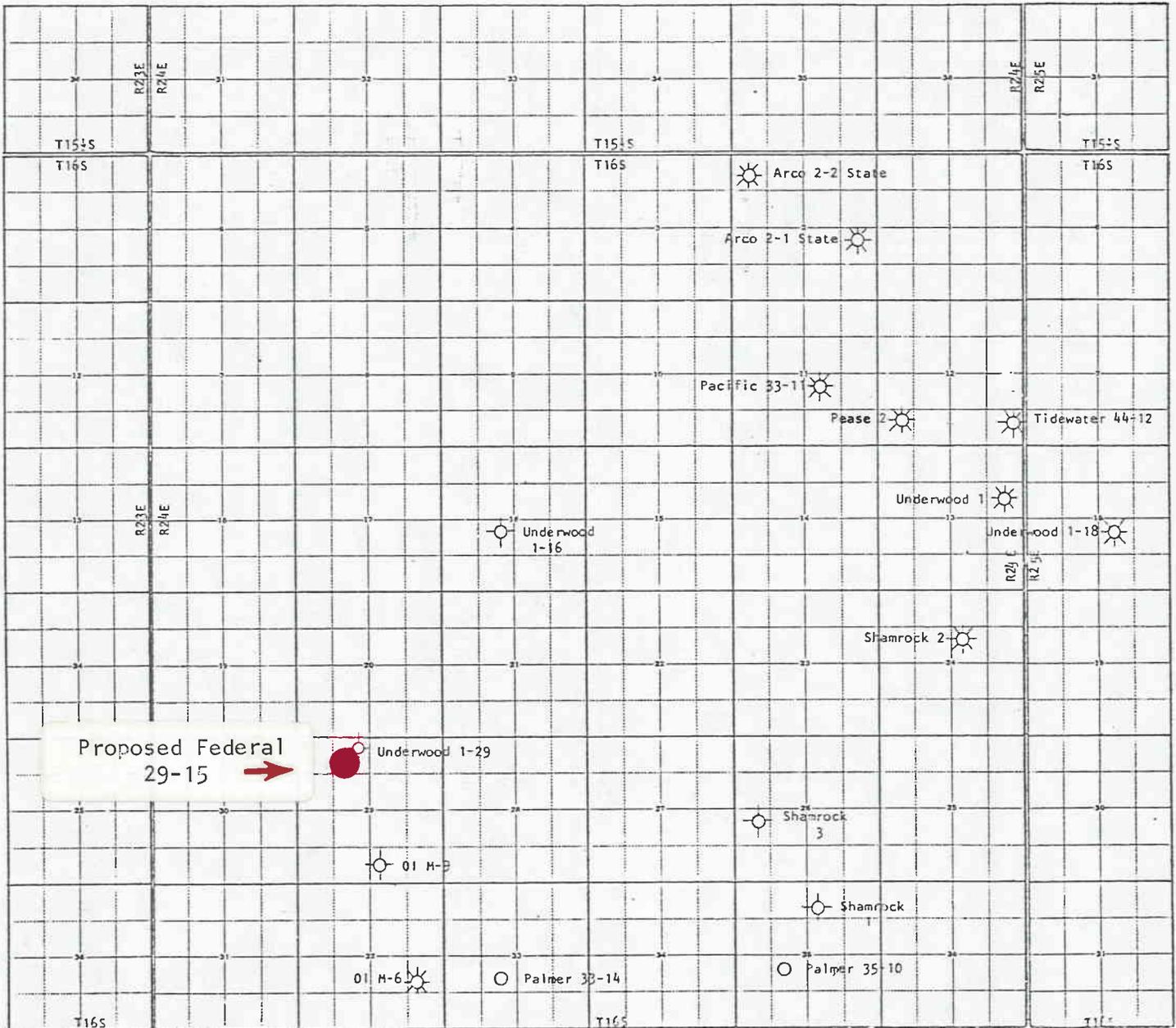
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4359  
4358  
4357

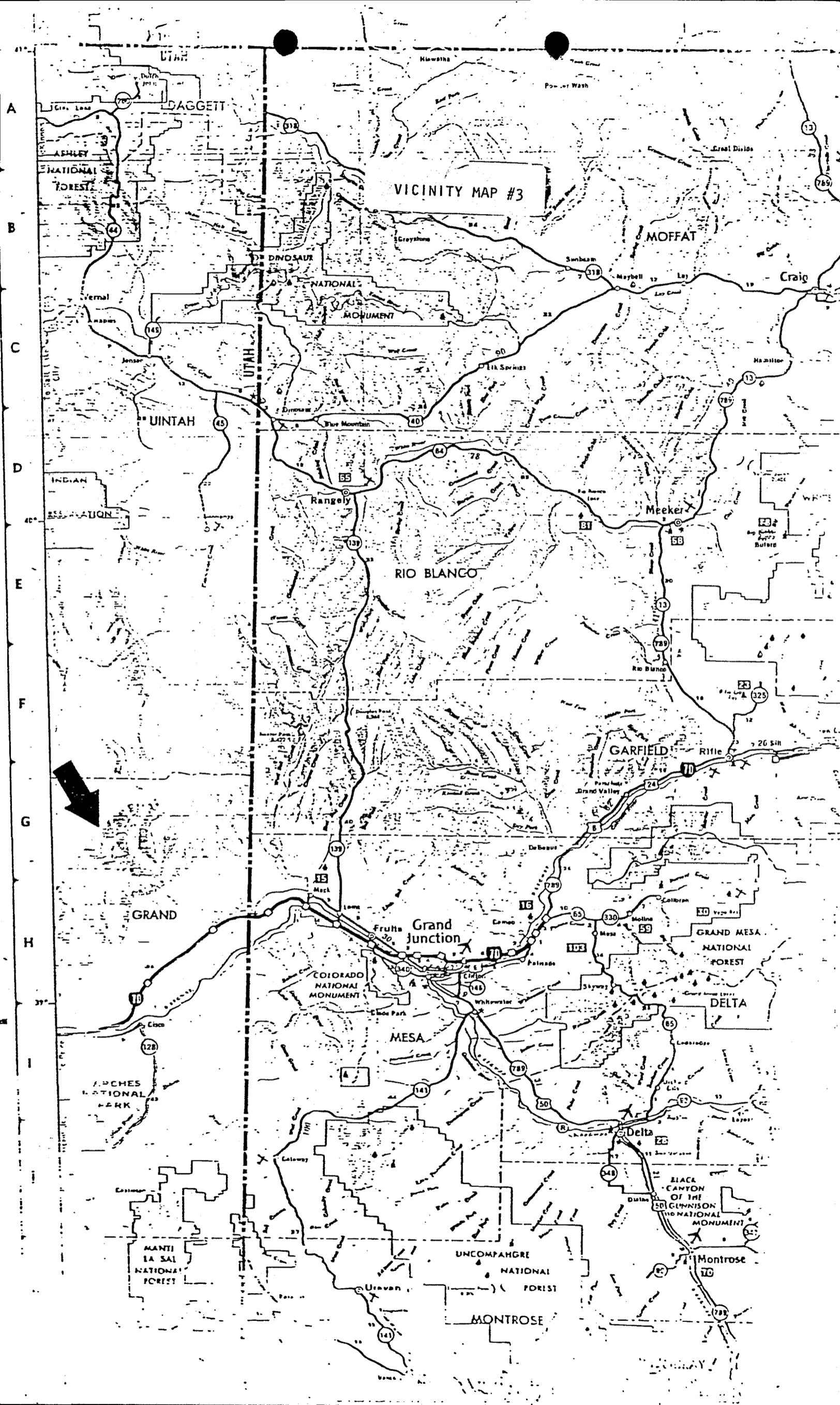
39°22'3"

380 000 FEET

WELL MAP NO. 2

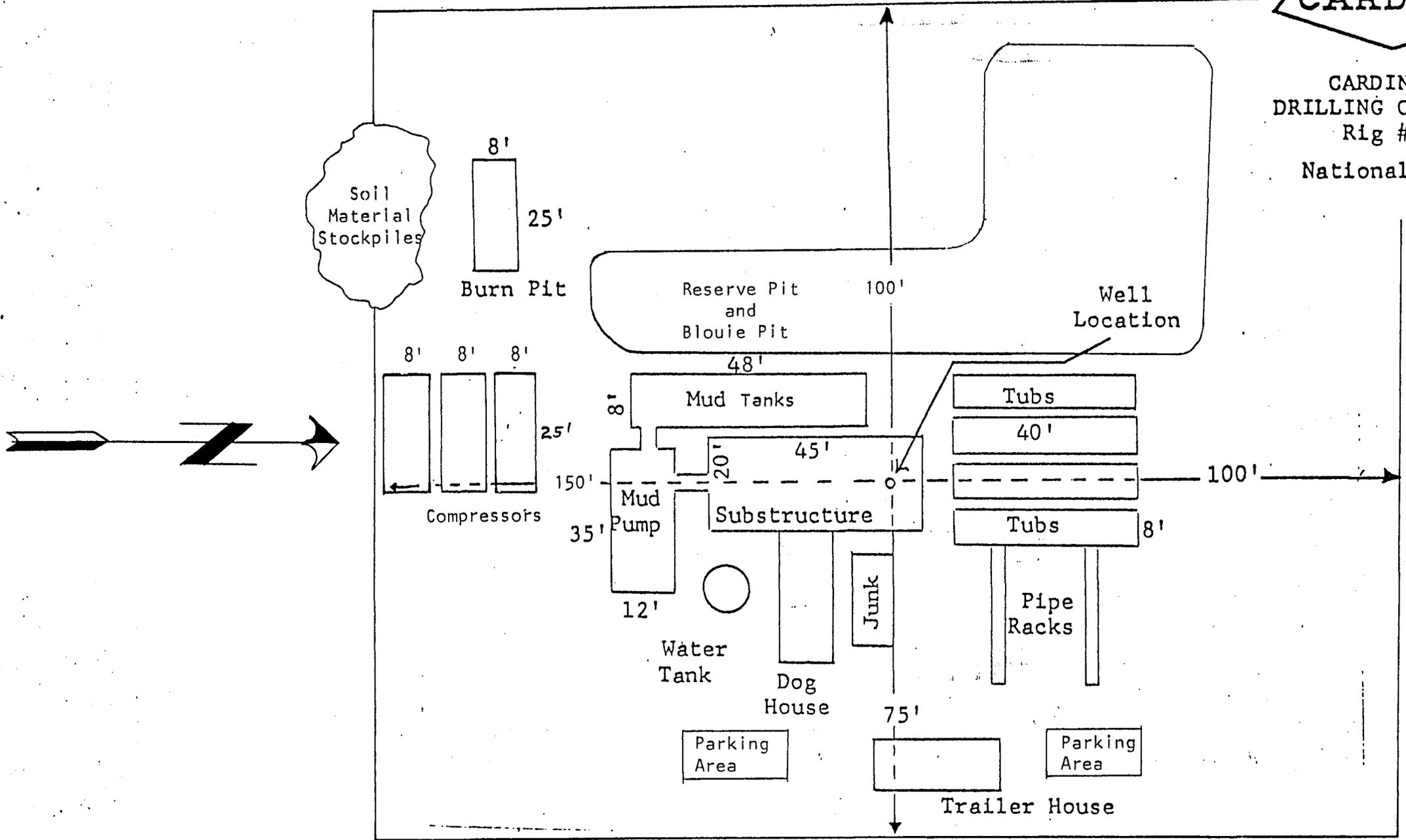
Township 16 South, Range 24 East, County Grand, State Utah







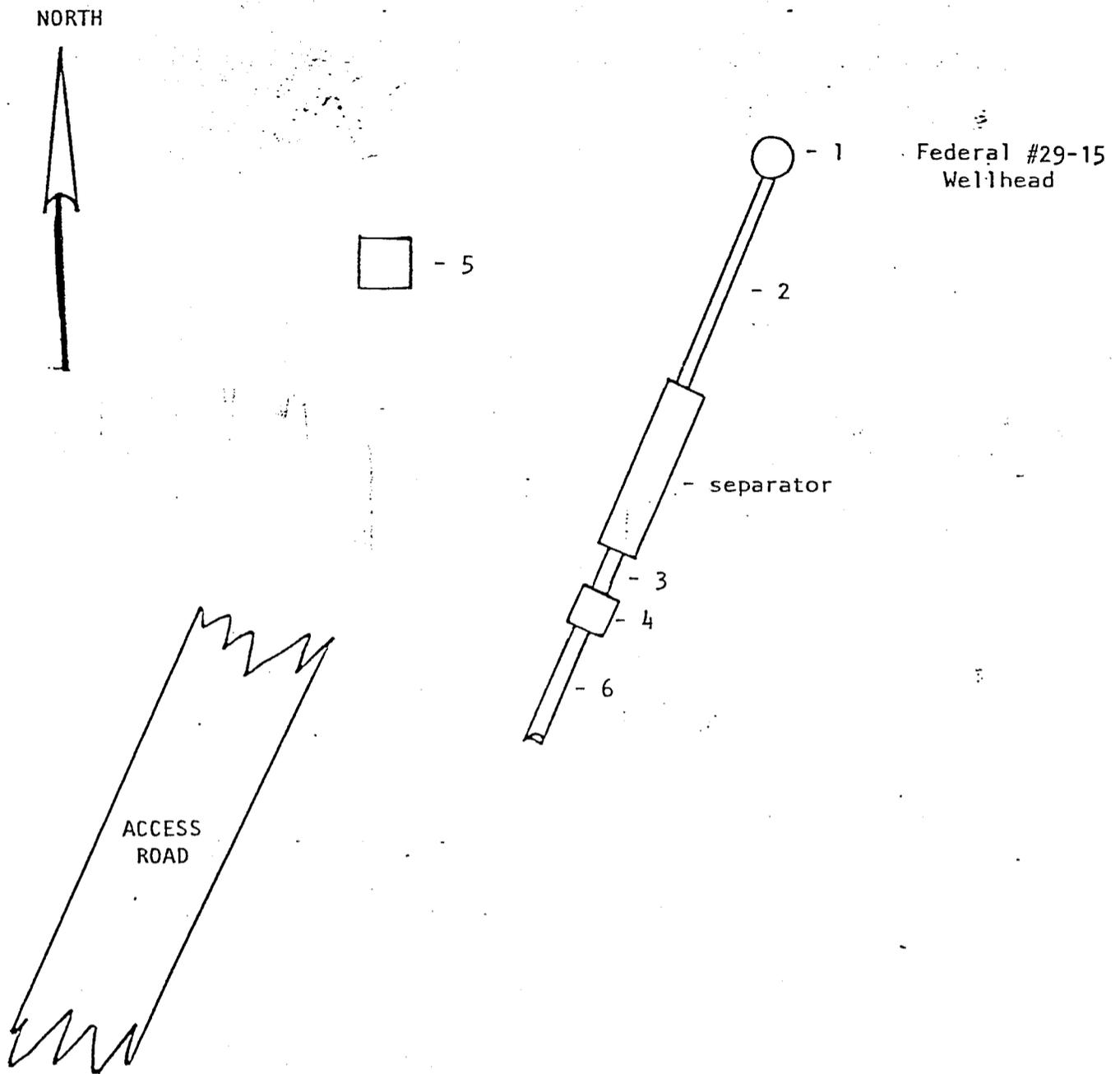
CARDINAL  
DRILLING COMPANY  
Rig #4  
National T-32



PLAN OF DRILLSITE LAYOUT

PLAT NO. 2-A

PLAT #3

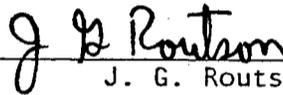


1. Wellhead will be 4-1/2" x 2-3/8" flange x screw with donut hanger full opening valve. All 2000# WP or greater to meet PO&GC specifications.
2. Line between wellhead and separator will be approx. 75 feet in length and constructed of 2-3/8" .218 wall seamless, welded, wrapped and buried approx. 5 feet deep.
3. Line between separator and meter will be 4" or 4.028 OD seamless, welded, coated, wrapped and buried and will be approx. 25 feet in length.
4. Meter run will be American 4" run, 500 psi static rating, 100" of water differential rating.
5. Pit, if necessary will be 10' x 10', enclosed by dikes and fenced.
6. Gathering system has not yet been designed.

WELL CONTROL PLAN

1. Surface Casing: 9-5/8" O.D. 36#/ft., Grade K-55, Short T&C, set at 120' or deeper, cemented with pump and plug method back to the surface or bottom of cellar.
2. Casinghead Flange: 9-5/8" x 10-3/4" top 1500 psig W.P. Larkin (or equivalent) casinghead with two 2" 1500 psi L.P. outlets.
3. Intermediate Casing: 7" O.D. 20#/ft., Grade K-55, Short T&C, set at 2643', cemented with pump and plug method using 150 sacks or more. At least 12 hours WOC time will be required before drilling the plug.
4. Blowout Preventor: A 10" 3000 psig W.P. Double gate hydraulic Shaffer BOP (or equivalent) with drill; pipe rams and blind rams. All fill, kill and choke lines will be minimum of 2" 2000 psi W.P.
5. Auxiliary equipment: (a) Drill pipe floats will be allowed at contractor's discretion. (b) Visual monitoring of air returns will be maintained.
6. Anticipated bottom hole pressure is less than 1200 psi at 7100 or a gradient of .169 psi/ft. or less. No abnormal temperatures or hydrogen sulfide gas are anticipated.

PALMER OIL & GAS COMPANY

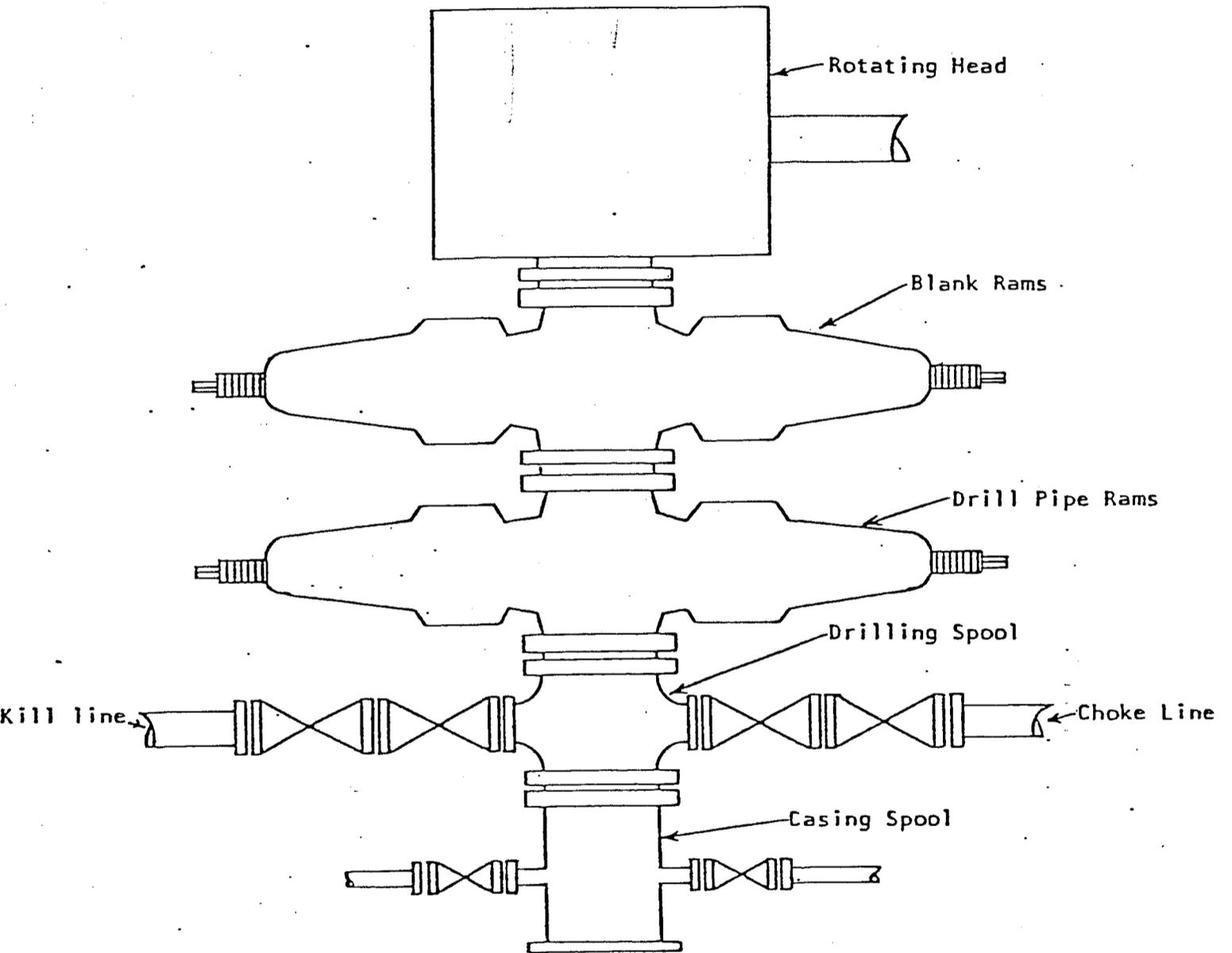
  
\_\_\_\_\_  
J. G. Routson

SCHEMATIC OF BOP STACK

AIR DRILLED WELLS  
using

900 series well head equipment

Interval from 120' to TD



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

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

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. 437847

OPERATOR: Palmer Oil & Gas Co

WELL NO. 29-15

LOCATION: SW 1/4 SE 1/4 1/4 sec. 29, T. 16S, R. 24E, S2W  
Grand Co. County, Utah

1. Stratigraphy: ~~3 feet - Fusch~~ ~~625 ft~~

Mesaverde - surface

Buck Tongue } mancos-2520

Castlegate - 2790

Mancos - 2900

Dakota/Carbonate 6460

Morrison 6600

2. Fresh Water:

possible usable water to 2000 in Mesaverde

3. Leasable Minerals:

coal not commercial in mesaverde

4. Additional Logs Needed:

adequate

5. Potential Geologic Hazards:

none expected

6. References and Remarks: Bill 852

Signature: [Signature]

Date: 7-16-79

STATE OF UTAH  
DIVISION OF OIL, GAS, AND MINING

\*\* FILE NOTATIONS \*\*

Date: June 4, 1979

Operator: ~~Partner Oil & Gas Co.~~ Energy Increments, Inc.

Well No: Federal 29-15

Location: Sec. 29 T. 16S R. 24E County: Grand

File Prepared:

Entered on N.I.D.:

Card Indexed:

Completion Sheet:

API Number: 43-019-30519

CHECKED BY:

Administrative Assistant: \_\_\_\_\_

Remarks:

Petroleum Engineer: M. J. Minder 6-11-79

Remarks:

Director: Feight

Remarks:

INCLUDE WITHIN APPROVAL LETTER:

Bond Required:

Survey Plat Required:

Order No. 165-4 5/23/79

Surface Casing Change   
to \_\_\_\_\_

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

O.K. Rule C-3

O.K. In \_\_\_\_\_ Unit

Other:

Letter Written/Approved



SCOTT M. MATHESON  
Governor

GORDON E. HARMSTON  
Executive Director,  
NATURAL RESOURCES

CLEON B. FEIGHT  
Director

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116  
(801) 533-5771

June 14, 1979

OIL, GAS, AND MINING BOARD

CHARLES R. HENDERSON  
Chairman

JOHN L. BELL  
C. RAY JUVELIN  
THADIS W. BOX  
CONSTANCE K. LUNDBERG  
EDWARD T. BECK  
E. STEELE McINTYRE

PALMER OIL AND GAS - ENERGY INCREMENTS  
P O BOX 2564  
BILLINGS MT 59103

Re: Well No. Federal 3-8, Sec. 3, T17S, R24E, Grand County, UT  
FEDERAL 4-12, Sec. 4, T17S, R24E, Grand County, UT  
Federal 29-15, Sec. 29, T16S, R24E, Grand County, UT

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with the Order issued in Cause No. 165-4 dated May 23, 1979.

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 - Geological Engineer  
HOME: 876-3001  
OFFICE: 533-5771

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 numbers assigned to the above wells are as follows:

Federal 3-8 43-019-30521  
Federal 4-12 43-019-30522  
Federal 29-15 43-019-30519

Yours very truly,

DIVISION OF OIL, GAS, AND MINING

  
Cleon B. Feight, Director

cc: U. S. Geological Survey

PALMER OIL & GAS COMPANY

P.O. BOX 2564  
BILLINGS, MONTANA 59103  
(406) 248-3151

August 29, 1979

Mr. E. W. Gynn  
U. S. Geological Survey  
8440 Federal Building  
Salt Lake City, Utah 84138

Attention: Robert Hendricks



*Operator  
name  
change*

Re: Application for Permit to Drill  
Federal No. 29-15 Well  
SW $\frac{1}{4}$ SE $\frac{1}{4}$  Section 29-T16S-R24E  
Grand County, Utah

30519

Gentlemen:

Pursuant to my telephone conversation with Mr. Hendricks yesterday, enclosed herewith is a Sundry Notice and Designation of Operator to change the operator of the captioned well to Energy Increments, Inc. I was advised by the Bureau of Land Management office in Salt Lake City that the statewide bond required from Energy Increments is in their office and they will review same this week and advise your office by telephone.

You were also furnished telecopies of the enclosed forms this morning.

Hopefully, this information, along with the statewide bond, will enable your office to approve our Application for Permit to drill this well.

Very truly yours,

PALMER OIL & GAS COMPANY

By: Ardyce E. Howell  
(Mrs.) Ardyce E. Howell  
Drilling Department

ah  
Enclosures

cc: State of Utah Department  
of Natural Resources w/encl.

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  
Energy Increments, Inc.

3. ADDRESS OF OPERATOR  
P. O. Box 15015, Las Vegas, Nevada 89114

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 682' FSL, 2130' FEL  
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) <u>Change of Operator</u>			

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.)\*

Change of Operator from Palmer Oil & Gas Company - Energy Increments, Inc., to Energy Increments, Inc. Designation of Operator attached hereto.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

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

SIGNED W. F. Allen TITLE Secretary DATE August 28, 1979

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

5. LEASE U-37847	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
7. UNIT AGREEMENT NAME	
8. FARM OR LEASE NAME Federal	
9. WELL NO. 29-15	
10. FIELD OR WILDCAT NAME Westwater	
11. SEC., T., R., M. OR BLK. AND SURVEY OR AREA SW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec 29-T16S-R24E	
12. COUNTY OR PARISH Grand	13. STATE Utah
14. API NO.	
15. ELEVATIONS (SHOW DF, KDB, AND WD) 7382' GL 7393' KB	

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

# DESIGNATION OF OPERATOR

Federal #29-15

The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE: Salt Lake City, Utah  
SERIAL NO.: USA U-37847

and hereby designates

NAME: Energy Increments, Inc.  
ADDRESS: P. O. Box 15015, Las Vegas, Nevada 89114

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

Township 16 South, Range 24 East  
Section 29: S $\frac{1}{2}$

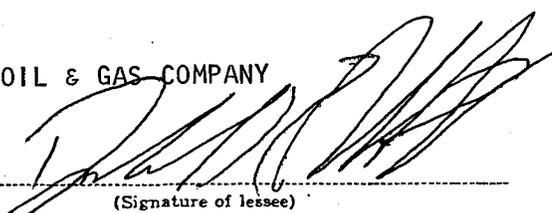
Grand County, Utah

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.

PALMER OIL & GAS COMPANY

By:   
-----  
(Signature of lessee)

Donald K. Roberts, President

P. O. Box 2564, Billings MT 59103

August 28, 1979

-----  
(Date)

-----  
(Address)

**Tenneco Oil**  
A Tenneco Company

Penthouse  
720 South Colorado Blvd.  
Denver, Colorado 80222  
(303) 758-7130



October 23, 1979

*Kathy* 7



Mr. Cleon B. Feight  
Utah Division of Oil, Gas & Mining  
1588 West, North Temple  
Salt Lake City, Utah 84111

RE: Tenneco Well formerly operated  
by Palmer Oil and Gas Company  
Grand County, Utah

Gentlemen:

The following wells formerly operated by Palmer Oil and Gas Company will now be operated by Tenneco Oil Company. Please note that record title to several of these wells will be held by Energy Increments, Inc., and Pate Oil Company, however, Tenneco Oil Company will continue to operate the wells.

Grand County, Utah

Township 16 South, Range 24 East

Sec. 33: 33-14/ Section 29: Federal 29-15/  
Sec. 35: 35-10/ Section 28: Federal 28-15

Township 16 South, Range 25 East

Section 13: Federal 13-9-SIGW  
Section 17: Federal 17-9-SIGW  
Section 14: Federal 14-2

Township 16 South, Range 26 East

Section 32: State 32-1-SIGW  
State 32-11-SIGW  
Section 33: Federal 33-13-SIGW  
Section 16: State 16-4

Township 17 South, Range 24 East

-SIGW-Section 3: Federal 3-8/Section 5: Federal 5-13  
SIGW-Federal 3-15/Section 14: Federal 14-4

Section 4: Federal 4-12

Township 17 South, Range 25 East

Section 6: Federal 6-7  
Federal 6-14-SIGW  
Section 7: Federal 7-4-SIGW  
Section 29: Federal 29-1

Township 17 South, Range 26 East

Section 5: Federal 5-4-SIGW  
Federal 5-9-SIGW  
Section 8: Federal 8-5-SIGW

\*\*\*SIGW=SHUT IN GAS WELL  
REMAINING ARE DRILLING WELLS

**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  
Tenneco Oil Company

3. ADDRESS OF OPERATOR  
720 S. Colorado Blvd., Denver, CO 80222

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 682'FSL & 2130'FEL  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

5. LEASE  
USA-U-37847

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Federal

9. WELL NO.  
29-15

10. FIELD OR WILDCAT NAME  
Westwater

11. SEC., T., R., M. OR BLK. AND SURVEY OR AREA  
Sec. 29, T16S, R24E

12. COUNTY OR PARISH  
Grand

13. STATE  
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)  
7382'GL

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) <u>spud, surface and production casing</u>	

(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.)\*

10/1/79-10/15/79

Spudded 12 1/2" hole on 10/1/79 and drilled to 107'. Ran 3 jts. 9 5/8" conductor pipe. NUBOP. Reduced hole to 7 7/8" and resumed drilling on 10/5. Ran 71 jts. of 7" csg to 2684'. Cmt w/420 sxs of 50/50 Pozmix, 1/4#/sk flocele. Did not circ cmt. Cmt annulus w/50sxs. Pump 100 sxs of 50/50 Pozmix, 1/4#/sk flocele, 5#/sk gilsonite and cmt to surface. WOC for 12 hrs. NU. Test to 900#, held ok. Drilled to TD (6993') on 10/12. On 6/15, ran 220 jts of 4 1/2" csg to 6990'. Cmt. w/225 sx RFC and 1/4#/sk flocele. WOC 12 hrs. Released rig. WOCU

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

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

SIGNED Carly Stathos TITLE Admin. Supervisor DATE 11/14/79

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:



February 25, 1980

Tenneco Oil Co.  
720 S. Colorado Blvd.  
Denver, Colorado 80222

Re: Well No. 29-15  
Sec. 29, T. 16S, R24E  
Grand County, Utah  
December 1979

Gentlemen:

Our records indicate that you have not filed the monthly drilling reports for the month indicated above on the subject well.

Rule C-22, General Rules and Regulations and Rules of Practice and Procedure, requires that said reports be filed on or before the sixteenth (16) day of the succeeding month. This report may be filed on Form OGC-1B, (U.S. Geological Survey Form 9-331) "Sundry Notices and Reports on Wells", or on company forms containing substantially the same information. We are enclosing forms for your convenience.

Your prompt attention to the above will be greatly appreciated.

Very Truly yours,

DIVISION OF OIL, GAS AND MINING



JANICE TABISH  
CLERK TYPIST

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

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

**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 type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. USA-U-37847
2. NAME OF OPERATOR Tenneco Oil Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR 720 S. Colo. Blvd., Denver, CO 802-2		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 682' FSL, 2130' FEL		8. FARM OR LEASE NAME Federal
14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.) 7382' GL	9. WELL NO. 29-15
		10. FIELD AND POOL, OR WILDCAT Westwater
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 29; T16S; R24E
		12. COUNTY OR PARISH Grand
		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) <u>Status Report: Completion</u>	

(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.) \*

10/30/79-11/20/79  
MIRUCU on 10/30/79. Logs indicate PBSD @ 6803', TOC: 5280'. Located hole in csg. between 3346' and 3378'. Attempted squeeze w/250 sxs cement-lost returns during displacement. Squeezed successfully of 90 sxs cmt. Located another leak between 3378 and 3386. Ran a series of squeezes totaling 150 sxs cmt. Press tested csg @ 3750 PSI-held ok. Perf'd @ 6602-32, 6632-40 w/2SPF (30 holes). Spotted 500 gal 15% HCL. Acidized w/386 bbls 5% HCL .75% quality foam. Frac'd w/10000# 100 mesh sand and 54,400# 20/40 sand. Determined that frac. material went through leak in csg isolated @ 3370-80. Landed 2 3/8" tubg. @ 6170'. Installed donut in WH. NU tree assembly. RDCU on 11/20. Temporarily abandoned.

**RECORDED**  
MAR 7 1980

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

SIGNED Cathy Stetson TITLE Admin. Supervisor DATE 3/3/80

(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  
Tenneco Oil Company

3. ADDRESS OF OPERATOR  
720 S. Colo. Blvd., Denver, CO 80222

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 682' FSL, 2130' FEL  
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 checked="" 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) <u>workover</u>	

5. LEASE USA-U-37847	
6. IF INDIAN, ALIEN, TRUSTEE OR TRIBE NAME	
7. UNIT AGREEMENT NAME	
8. FARM OR LEASE NAME Federal	
9. WELL NO. 29-15	
10. FIELD OR WILDCAT NAME Westwater	
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 29; T16S; R24E	
12. COUNTY OR PARISH Grand	13. STATE Utah
14. API NO.	
15. ELEVATIONS (SHOW DF, KDB, AND WD) 7382' GL	

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

*need monthly w.c. report dr. 1/6-80 thru Dec. 80*

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.)\*

5/7/80

*Jokela - 832 - est.*

Tenneco plans to stimulate production by fracture treating the Federal 29-15 per the attached schedule.

APPROVED BY THE DIVISION OF  
OIL, GAS, AND MINING

DATE 5-20-80

BY: M. G. Minder

**RECEIVED**  
MAY 13 1980

Subsurface Safety Valve: Manu. and Type

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

SIGNED Cheryl Statterman TITLE Admin. Supervisor DATE 5/8/80

DIVISION OF  
OIL, GAS & MINING  
Ft.

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

605  
2130 E

USA-4-5 1841  
29. 165-24E  
Grand, Utah

LEASE Federal

WELL NO. 29-15

7382' Gal  
Westwater

7 "OD, 20 LB, CSG. W/ 570 SX

TOC @ surface

4-1/2 "OD, 10.5 LB, CSG. W/ 225 SX

TOC @ 5300'

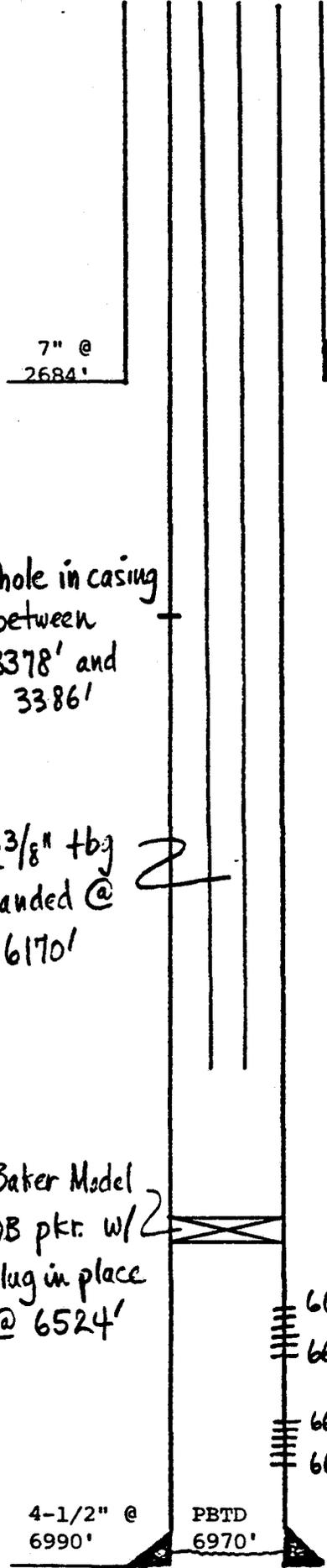
DETAILED PROCEDURE

1. MIRUSU. Install BOPE. POOH w/2-3/8" tbg.
2. Run cement bond log to locate squeeze cement (from approx. 3700' to top of cement).
3. RIH w/2-3/8" tbg and tension pkr and isolate hole. Pull up and set pkr 700' above hole. Establish circulation dn tbg. Squeeze hole w/100 sx RFC cement followed by 50 sx Class G cement with 1% D-60. Reverse out tubing. WOC. POOH w/tbg.
4. RIH w/tbg and bit and clean out cement. POOH w/tbg and bit.
5. Fill 4-1/2" x 7" annulus with water. Pressure test 4-1/2" csg to 1500 psi.
6. RIH w/2-3/8" tbg and pkr milling tool w/junk basket above milling tool and mill out Model DB pkr. Run tool below perms to check for sand fill. POOH w/tbg and tool.
7. RIH w/2-7/8" tbg and tension pkr and hydrotest to 8000 psi. Set pkr @5500'. Fill annulus and pressure to 1000 psi.
8. Frac well dn tbg with 75% quality foam @15 BPM max rate as follows:

- Liquid volumes:
- 24 bbl pad
  - 24 bbl w/6 ppg 100 mesh sand
  - 12 bbl w/8 ppg 100 mesh sand
  - 12 bbl spacer
  - 6 bbl w/2 ppg 20/40 sand
  - 12 bbl w/3 ppg 20/40 sand
  - 18 bbl w/4 ppg 20/40 sand
  - 12 bbl spacer
  - 24 bbl w/5 ppg 20/40 sand
  - 24 bbl w/6 ppg 20/40 sand
  - 12 bbl spacer
  - 36 bbl w/7 ppg 20/40 sand
  - 12 bbl spacer
  - 36 bbl w/7 ppg 20/40 sand
  - 12 bbl spacer
  - 40 bbl w/8 ppg 20/40 sand
  - Flush

Total 53,000 gal foam and 60,000# sand (10,000# 100 mesh and 50,000# 20/40 mesh).

9. Flow back to pit to clean up and test rate.
10. Kill well if necessary. POOH w/2-7/8" tbg and pkr. RIH w/2-3/8" tbg and 1.81" Baker F nipple one jt from btm. Land tbg @6650'. Remove BOPE. Install tree.
11. Swab in well and flow to get rate.
12. RDMSU. Shut-in well.



7" @  
2684'

hole in casing  
between  
3378' and  
3386'

2 3/8" tbg  
landed @  
6170'

Baker Model  
DB pkr. w/  
plug in place  
@ 6524'

4-1/2" @  
6990'

PBTD  
6970'

6602'  
6608'  
6632'  
6640'

**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.

15

5. LEASE DESIGNATION AND SERIAL NO.  
USA U - 37847

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Federal

9. WELL NO.  
29-15

10. FIELD AND POOL, OR WILDCAT  
Westwater

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
Sec 29 T16S, R24E

12. COUNTY OR PARISH  
Grand

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 Temporary Abandonment

2. NAME OF OPERATOR  
Tenneco Oil Company

3. ADDRESS OF OPERATOR  
Box 3249, Englewood, Co 80155

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 682' FSL 2130' FEL **SW SE**  
At top prod. interval reported below  
At total depth

14. PERMIT NO. 43-019-30519 | DATE ISSUED 6-12-79

15. DATE SPUDDED 10/1/79 | 16. DATE T.D. REACHED 10/12/79 | 17. DATE COMPL. (Ready to prod.) 11-20-79 T.A. | 18. ELEVATIONS (DF, REB, RT, GR, ETC.)\* 7382' gr | 19. ELEV. CASINGHEAD -

20. TOTAL DEPTH, MD & TVD 6990' | 21. PLUG, BACK T.D., MD & TVD 6970' | 22. IF MULTIPLE COMPL., HOW MANY\* \_\_\_\_\_ | 23. INTERVALS DRILLED BY → | ROTARY TOOLS 0' TD | CABLE TOOLS -

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
None

25. WAS DIRECTIONAL SURVEY MADE  
No

26. TYPE ELECTRIC AND OTHER LOGS RUN  
IEL, FDC/GR CNL TDT

27. WAS WELL CORED  
No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
7"	20#	2684'	11"	570sx	
4½"	10.5#	6990'	6¼"	225sx	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	6170'	

31. PERFORATION RECORD (Interval, size and number)

6602'-08'  
6632-40' Dakota

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
6602-6640'	53,000gals 75% qual. foam
	10,000# 100 mesh sand
	50,000# 20/40 sand

33.\* PRODUCTION

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

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 Carly Hutton TITLE Asst. Div. Adm. Mgr. DATE January 20, 1981

\*(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.	GEOLOGIC MARKERS	
	MEAS. DEPTH	TRUE VERT. DEPTH			NAME	MEAS. DEPTH
Castlegate	2810		2890	Sand, Shaley sand, gas	Mancos "B"	3520
Mancos B	4020		4040	Shaley sand, gas	Dakota Silt	6430
Dakota	6480		6720	Sand, Shale, gas, water		
Morrison	6720		TD	Shale, sand, water, gas		

March 31, 1981

Tenneco Oil Company  
Box 3249,  
Englewood, Colorado, 80155

Re: Well No. 29-15  
Sec. 29, T. 16S. R. 24E.  
Grand County, Utah

Gentlemen:

According to our records, a "Well Completion Report" filed with this office, on January 20, 1981, from above referred to well indicates the following electric logs were run: IEL, FDC, GR, CNL, TDI. As of today's date this office has not received these logs.

Your prompt attention to the above will be greatly appreciated.

Sincerely,

DIVISION OF OIL, GAS, AND MINING

SANDY BATES  
CLERK-TYPIST



STATE OF UTAH  
NATURAL RESOURCES & ENERGY  
Oil, Gas & Mining

Scott M. Matheson, Governor  
Temple A. Reynolds, Executive Director  
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

April 23, 1982

Tenneco Oil Company  
Box 3249  
Englewood, Colorado 80155

Re: Well No. 29-15  
Sec. 29, T. 16S, R. 24E.  
Grand County, Utah

Well No. Willow Creek East #30-5  
Sec. 30, T. 19S, R. 21E.  
Grand County, Utah

Gentlemen:

The above referred to wells have been currently under a temporarily abandoned status for six months or longer. Please inform this office of the current status of these well locations and send in the necessary required papers.

Your prompt attention to the above will be greatly appreciated.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Cari Furse  
Clerk Typist

# Tenneco Oil Exploration and Production

A Tenneco Company

Western Rocky Mountain Division

P.O. Box 3249  
Englewood, Colorado 80155  
(303) 740-4800

Delivery Address:  
6061 South Willow Drive  
Englewood, Colorado



April 30, 1982

State of Utah  
Natural Resources & Energy  
Oil, Gas and Mining  
4241 State Office Building  
Salt Lake City, UT 84114

Attn: Cari Furse

RE: Federal #29-15, Sec. 29, T16S  
R24E, Grand County, UT and  
Willow Creek East #30-5, Sec. 30,  
T19S, R21E, Grand County, UT

Dear Ms. Furse:

The status of the above referenced wells is as follows:

Federal #29-15 - to be recompleted in the Mancos

Willow Creek East #30-5 - still under evaluation

Sundries and other necessary paperwork will be submitted as soon as detailed information is available.

Sincerely,

TENNECO OIL COMPANY

A handwritten signature in cursive script that reads "Denise Wilson".

Denise Wilson  
Production Analyst

DW:jt

RECEIVED  
MAY 6 3 1982

DIVISION OF  
OIL, GAS & MINING



STATE OF UTAH  
NATURAL RESOURCES & ENERGY  
Oil, Gas & Mining

Scott M. Matheson, Governor  
Temple A. Reynolds, Executive Director  
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

April 22, 1983

Tenneco Oil Exploration & Production  
6061 South Willow Drive  
Englewood, Colorado 80155

Re: Well No. # 29-15  
Sec. 29, T. 16S, R. 24E.  
Grand County, Utah

Well No. Willow Creek East # 30-5  
Sec. 30, T. 19S, R. 21E.  
Grand County, Utah

Gentlemen:

The above referred to wells have been currently under a temporarily abandoned status for six months or longer. Would you be kind enough to inform this office of a change in status, or let us know if they are still temporarily abandoned, submitted on a Sundry Notice (Form OGC-1B, enclosed).

Thank you for your prompt attention to the above submittal.

Respectfully,

DIVISION OF OIL, GAS AND MINING

A handwritten signature in cursive script that reads "Cari Furse".

Cari Furse  
Well Records Specialist

CF/cf  
Enclosure

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

5. LEASE DESIGNATION AND SERIAL NO. USA-U-37847	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
7. UNIT AGREEMENT NAME	
8. FARM OR LEASE NAME Federal	
9. WELL NO. 29-15	
10. FIELD AND POOL, OR WILDCAT Westwater	
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 29, T16S, R24E	
12. COUNTY OR PARISH Grand	13. STATE Utah

**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  
Tenneco Oil Company

3. ADDRESS OF OPERATOR  
Box 3249, Englewood, CO 80155

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\* See also space 17 below.)  
At surface 682' FSL, 2130' FEL

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
7382' GR

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) <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.)\*

This well is temporarily abandoned pending evaluation for recompletion in the Mancos formation.

**RECEIVED**  
MAY 04 1983

DIVISION OF  
OIL, GAS & MINING

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

SIGNED Ken Russell TITLE Sr. Production Analyst DATE May 2, 1983

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

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

**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.)

<div style="position: absolute; top: -20px; left: 50%; transform: translate(-50%, -50%); font-weight: bold; font-size: 1.2em;">RECEIVED</div>		5. LEASE DESIGNATION AND SERIAL NO. USA U-37847
1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Tenneco Oil Company		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR P. O. Box 3249, Englewood, CO 80155		8. FARM OR LEASE NAME Federal
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface  682' FSL, 2130' FEL		9. WELL NO. 29-15
14. PERMIT NO.		10. FIELD AND POOL, OR WILDCAT Westwater
15. ELEVATIONS (Show whether DP, RT, GR, etc.) 7382' GR		11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA Sec. 29, T16S, R24E
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		12. COUNTY OR PARISH Grand
13. STATE UT		18. STATE UT

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"/> FRACTURE TREAT <input type="checkbox"/> SHOOT OR ACIDIZE <input type="checkbox"/> REPAIR WELL <input type="checkbox"/> (Other) <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPLETE <input type="checkbox"/> ABANDON* <input checked="" type="checkbox"/> CHANGE PLANS <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/> FRACTURE TREATMENT <input type="checkbox"/> SHOOTING OR ACIDIZING <input type="checkbox"/> (Other) <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> ABANDONMENT* <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.)\*

Tenneco requests permission to plug and abandon the referenced well according to the attached detailed procedure.

*Note:*  
Federal approval of this action is received.

ACCEPTED  
 APPROVED BY THE STATE  
 OF UTAH DIVISION OF  
 OIL, GAS, AND MINING  
 DATE: 8/20/84  
 BY: John R. Bays

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

SIGNED *[Signature]* TITLE Sr. Regulatory Analyst DATE 8/14/84

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

P & A

3018

LEASE Federal

WELL NO. 29-15

9-5/8 "OD, K-55 LB, 36 CSG.W/ None SX

Conductor

7 "OD, 20.0 LB, K-55 CSG.W/ 225 SX

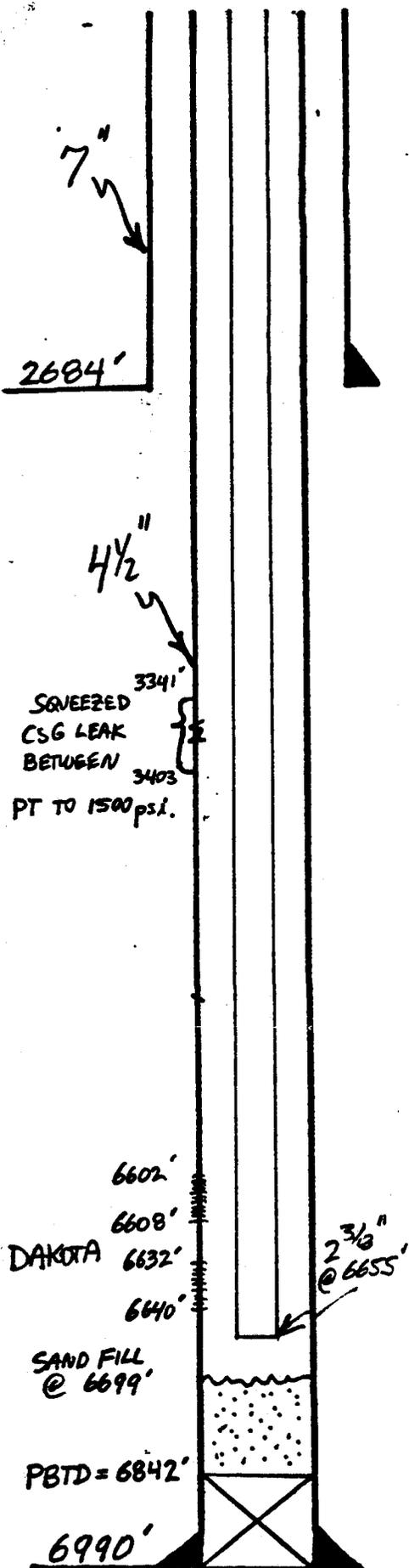
TOC @ surface (200 sx top job)

4-1/2 "OD, 10.5 LB, K-55 CSG.W/ 225 SX

TOC @ 5,280' by CBI

DETAILED PROCEDURE:

1. Blow well down. MIRUSU. Kill well if necessary.
2. NDWH. NUBOP.
3. POOH w/2-3/8" tbg. RIH w/4-1/2" cmt retainer and set @ 6550'. PT tbg to 2000 psi. Est. rate into perfs. Squeeze perfs w/50 sxs Class G Neat. Sting out of retainer & R/O tbg. POOH w/tbg.
4. MIRUWL. RIH w/4-1/2" csg freepoint tool & locate csg freepoint. Cut csg w/jet cutter.
5. POOH w/4-1/2" csg laying down.
6. RIH w/2-3/8" tbg to 100' below csg cutoff and spot 35 sx (200') cmt Plug across stub.
7. POOH w/tbg to 4000' and spot 100' plug (25 sxs). (Mancos 'B' top @ 4020').
8. POOH to 2734' (50' below 7" shoe) and spot a 100' plug across shoe w/25 sxs.
9. POOH to 200' and circ. cmt to surface. POOH w/tbg.
10. Cut off csg 4' below GL. Install P&A marker.
11. Clean, grade & reseed location per MMS requirements.



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE  
(Other instructions  
verse side)

Form approved  
Budget Bureau No. 1004-0135  
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.

USA-U-37847

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal

9. WELL NO.

29-15

10. FIELD AND POOL, OR WILDCAT

Westwater

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

Sec. 29, T16S, R24E

12. COUNTY OR PARISH 13. STATE

Grand

UT

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  
Tenneco Oil Company

3. ADDRESS OF OPERATOR  
P. O. Box 3249, Englewood, CO 80155

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

682' FSL, 2130' FEL

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

7382' GR

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETION

SHOOT OR ACIDIZE

ABANDON\*

REPAIR WELL

CHANGE PLANS

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREATMENT

ALTERING CASING

SHOOTING OR ACIDIZING

ABANDONMENT\*

(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.)\*

09/07/84: MIRU.

09/10/84: N/U BOP's. TIH to 303', hit tight spot, prematurely set retainer, attempt to free retainer w/no results.

09/12/84: With open ended 2-3/8" bg hung at 6640'. Equalized 75 sx plug Class "G" cmt. (Est top 5645). Pull above cmt, reverse w/8.6 ppg gelled mud. Spot 50 sxs Class "G" cmt w/tbg hung at 4000': (Est TOC @3363). Pull above cmt. POH. ND BOP's. Change to 4-1/2" rams, pull slips w/50,000#.

09/13/84: Free-point 4-1/2" csg @2370'. TIH & cut 4-1/2" csg @2370'. Pull & lay dn 4-1/2" csg.

09/14/84: TIH to 2470' (100' into 4-1/2" csg stub). Fill hole w/H<sub>2</sub>O, set plug in 4-1/2" X 7" csg w/50 sxs Class "G" cmt. (Est top of plug @2150'). Set top plug of Class "G" cmt w/2% CaCl<sub>2</sub> fr 300' to surface. Pull & lay dn 2-3/8" tbg. R/D BOP's. Unscrewed Bradenhead. Welded on dry hole marker. R/D & move off location.

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

SIGNED

*Scott M. Kenny*

TITLE

Sr. Regulatory Analyst

DATE

9/18/84

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

Form approved.  
Budget Bureau No. 1004-0135  
Expires August 31, 1985

**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.)

RECEIVED

OCT 02 1985

DIVISION OF OIL  
GAS & MINING

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
Tenneco Oil Company

3. ADDRESS OF OPERATOR  
P. O. Box 3249, Englewood, CO 80155

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

682'  $\nabla$ SL, 2130' FEL

14. PERMIT NO.

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

7382' GR

5. LEASE DESIGNATION AND SERIAL NO.

U-37847

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal

9. WELL NO.

29-15

10. FIELD AND POOL, OR WILDCAT

Westwater

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

Sec. 29, T16S R24E

12. COUNTY OR PARISH 13. STATE

Grand

UT

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

PULL 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) Restoration

(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.)\*

The referenced well was reclaimed 8-22-85 and reseeded on 9-5-85 per BLM guidelines. The location was inspected and approved by BLM representative, Jeff Robbins on Sept. 5, 1985.

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

SIGNED

TITLE Senior Regulatory Analyst

DATE

9/27/85

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING  
DRILLING AND WELL PLUGGING INSPECTION FORM

COMPANY: Tenneco

WELLNAME: Federal 29-15 API# 43-019-30519

SECTION: 29 TWP: 16S RANGE: 24E

INSPECTOR: JM TIME: 10:30 DATE: 7-14-88

REPRESENTATIVE: \_\_\_\_\_ PUSHER: \_\_\_\_\_

OPERATIONS: \_\_\_\_\_

SPUD DATE: 10/1/79 DEPTH: 6990

DRILLING AND COMPLETIONS:

- |  |                                       |                                     |
|--|---------------------------------------|-------------------------------------|
| <input type="checkbox"/> APD           | <input type="checkbox"/> WELL SIGN    | <input type="checkbox"/> SANITATION |
| <input type="checkbox"/> BOPE          | <input type="checkbox"/> BLOOIE LINE  | <input type="checkbox"/> H2S        |
| <input type="checkbox"/> VENTED/FLARED | <input type="checkbox"/> RESERVE PIT  | <input type="checkbox"/> FLARE PIT  |
| <input type="checkbox"/> BURN PIT      | <input type="checkbox"/> HOUSEKEEPING |                                     |

PLUGGING AND ABANDONMENTS:

PLUG TYPE	INTERVAL
_____	_____
_____	_____
_____	_____

PLUGS TESTED: \_\_\_\_\_ HOW \_\_\_\_\_ WOC \_\_\_\_\_

MARKER:  SURFACE  PLATE

RECLAMATION:

- CONTOUR  RIP  REHAB

LEGEND: (Y)-YES (P)-PROBLEM (U)-UNKNOWN (BLANK)-NOT APPICABLE

REMARKS:  
NFIN

APPROVED BY \_\_\_\_\_ HOW \_\_\_\_\_ DATE \_\_\_\_\_