

Shell

Federal

Harvey

File

Sec 10

T 325

R E

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
 Shell Oil Company

3. ADDRESS OF OPERATOR
 1700 Broadway, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface
 633' FWL and 1476' FNL Section 10
 At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.
 U-20707

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
 Shell Federal

8. FARM OR LEASE NAME
 Harvey

9. WELL NO.
 1-10

10. FIELD AND POOL, OR WILDCAT
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 SW/4 NW/4 Section 10-T32S-R1E

12. COUNTY OR PARISH 13. STATE
 Garfield Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 Approx. 35 miles from Bicknell

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 633'

16. NO. OF ACRES IN LEASE 2560

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. No other wells

19. PROPOSED DEPTH 8000'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 9747 Ungraded GL

22. APPROX. DATE WORK WILL START*
 9/1/75

Mussumu

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2	13-3/8"	54.5#	300'+	To surface
12-1/4	9-5/8"	36#	4000'+	To surface

ATTACHMENTS:

- Drilling Prognosis
- Certified Survey Plat
- Road & Topo Map
- 12 Pt Land Use Plan
- Supplemental Stipulation to Land Use Plan
- Road Construction and Maintenance Plan
- BOPE Drawings
- Location Layout Plat

Full C-3(c) Sept 1975

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 J. W. Linnel TITLE Div. Opers. Engr. DATE 7/30/75

(This space for Federal or State office use)
 PERMIT NO. 43-017-30069 APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

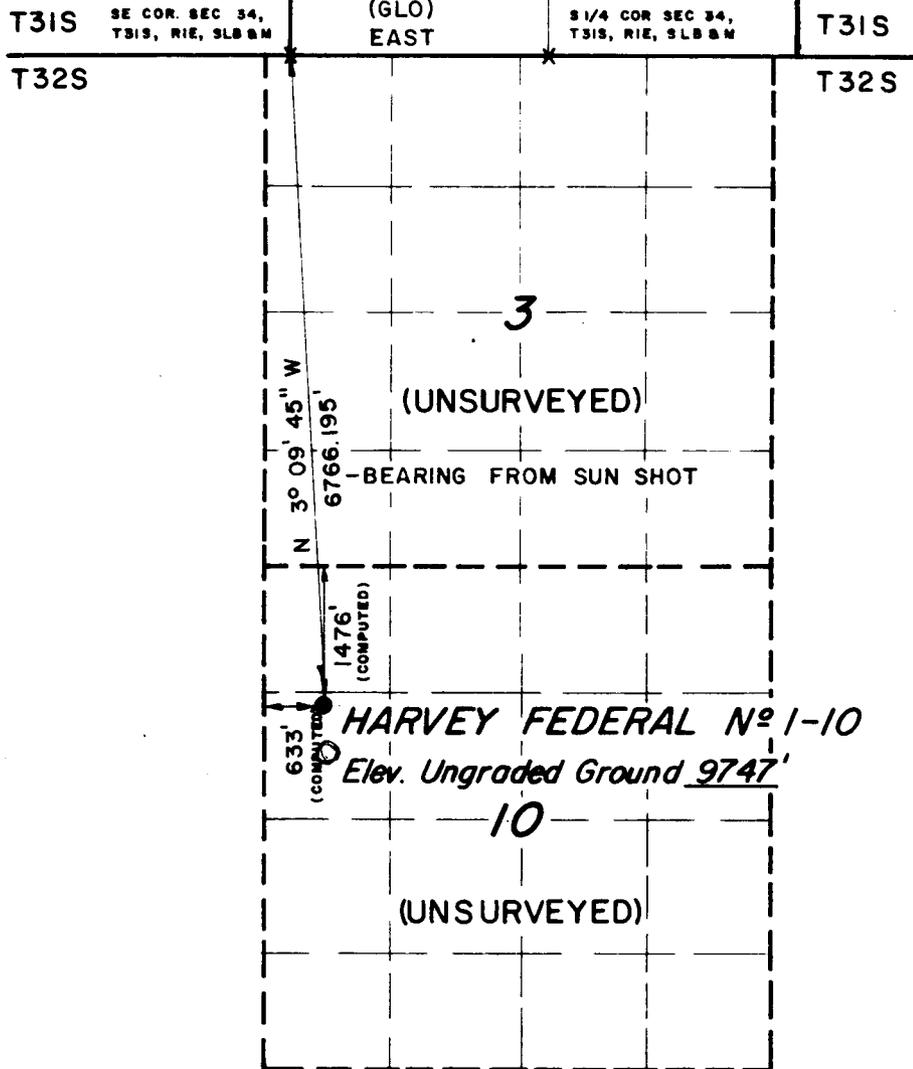
cc: Utah Oil and Gas Conservation Commission (2)
 Dixie Nat'l Forest, Forest Supvr., Cedar City, Utah (3)
 *See Instructions On Reverse Side

T32S, R1E, S.L.B. & M.

PROJECT

SHELL OIL COMPANY

Well location, Harvey Federal N°1-10,
located as shown in the SW 1/4 NW 1/4
Section 10, T32S, R1E, S.L.B. & M.
Garfield County, Utah.



X = Section corners located. (Brass caps)

NOTE: DATA FOR SECTIONS WAS TAKEN FROM PROTRACTION
DIAGRAM & MAY DIFFER FROM FUTURE SURVEYS.



CERTIFICATE

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

[Signature]
REGISTERED LAND SURVEYOR
REGISTRATION NO 2454
STATE OF UTAH

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

SCALE 1" = 2000'	DATE 7/22/75
PARTY DA DG SS	REFERENCES UTAH PROTRACT- ION DIAGRAM N° 34
WEATHER FAIR	FILE SHELL OIL CO.

DRILLING WELL PROGNOSIS

WELL N Shell Federal 1-10
 TYPE WELL Wildcat
 FIELD/AREA Zinc

APPROX. LOCATION (SUBJECT TO SURVEY) West 1/2 of Sec. 10 T32S R1E Garfield Co., Utah

EST. G. L. ELEVATION 9760 PROJECTED TO 8000 OBJECTIVE Redwall

OLE IZE	CASING PROGRAM	LOGGING PROGRAMS	MAX DEV.	DEPTHS AND FORMATION TOPS	SPECIAL INSTRUCTIONS
7½	13-3/8	↑ FDC/CNL/GR/Cal ↑ DIL/SP ↑ Sonic/GR/Cal ↑ Dipmeter ↑ Two Man Mud Logging Unit		300' Volcanics Sfc to 1000 Navajo 1000 Kayenta 2100 Wingate 2400 Shinarump 3300 Moenkopi 3500	SAMPLES: 10 foot sfc to TD CORES: Two 60 ft each DST'S: One in Kiabab Two in Redwall DEVIATION CONTROL Dogleg severity to be less than 1½° per any 100' interval. CEMENT 13-3/8 to Sfc 9-5/8 to Sfc
3/4	9-5/8	↓ FDC/CNL/GR/Cal ↓ DIL/SP ↓ Sonic/GR/Cal ↓ Dipmeter ↓ Two Man Mud Logging Unit	1° per 1000 feet	9-5/8 Casing 500' into Moenkopi Timpoweap 4300 Kiabab 4400 Cedar Mesa 5200 Redwall 6700 TD 8000	MUD Sfc - 300' Lime/Gel 300'-9-5/8 casing point Air or Foam 9-5/8 Point to TD Air or Foam or Lime Water

ORIGINATOR: L. A. Primm DATE 7/14/75

ENGINEERING APPROVAL: _____

OPERATIONS APPROVAL: _____

PETROLEUM: _____

OPERATIONS: _____

DIV. DRILLING SUPT.

PLANNED
Casing, CEMENTING AND MUD PROGRAMS

CONDUCTOR CASING at approx. 300 '

<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Connection</u>	<u>Length</u>	<u>Condition</u>
13 ³ / ₈ "	45 [#] /ft	H40	STC	300	New

Cement to be: Circulated to Surface

SURFACE CASING at approx. 4000 '

<u>Sec. No.</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Connection</u>	<u>Length</u>	<u>Condition</u>
1	9 ⁵ / ₈ "	36 [#] /ft	K55	STC	4000	New

Cement to be: Circulated to surface

PRODUCTION CASING at approx. 8000 ' IF required

<u>Sec. No.</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Connection</u>	<u>Length</u>	<u>Condition</u>
1	7"	26 [#] /ft	K55	STC	500	New
2	7"	23 [#] /ft	K55	STC	2500	New
3	7"	20 [#] /ft	K55	STC	5000	New

Cement to be: Circulated with cement top 1000' above upper most pay.

PRODUCTION LINER at approx. ' Not applicable

<u>Sec. No.</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Connection</u>	<u>Length</u>	<u>Condition</u>

Cement to be:

Max. Anticipated BHP: 3200 psi @ 8000 ft.

Well Name Federal 1-10

Drilling Fluid: Aerated water will

Field Zinc Area W.C.

be used as deep as possible. If mud is needed due to hole problems a low lime/gel/chemical fresh water mud will be used.

County Garfield

State Utah

Attachment No.

company. The drill site is in a small, closed basin and the possibility of water contamination through an oil spill or other accident is quite remote.

4. Vegetation

Vegetative ground cover is sparse on the drill site and proposed access road. It consists of scattered silver sagebrush and bunch grass, and small forbs. The project will have little effect on the vegetation except on the drill site and access road where it will be removed. When the project is complete, the drill site will be revegetated. The site will require special consideration including saving and respreading top soil, proper seed mix, fertilization, and protection fencing.

5. Wildlife and Fish

The proposed oil well will have little effect on wildlife and none on fish. The activity in the area and along access roads may cause some animals to move back into areas of less disturbance. The movement of animals will be of little significance due to the vast amount of summer range in the area. If the water needed for the drilling operation is hauled from nearby Big Lake, Hay Lake, or Cyclone Lake, excessive lowering of the water levels will have an adverse impact on wildlife and livestock. No deer winter range, sagegrouse nesting areas, Utah Prairie Dog towns or fisheries will be affected by the proposed drilling project. No threatened or endangered species are present or will be affected by the proposed project.

6. Social and Economic Uses

The development of a producing oil field would have a tremendous economic impact on the thinly populated Wayne and Garfield Counties. Garfield County would benefit from revenues of the oil produced, while Wayne County would receive most of the business from the workers who will live in Loa, Lyman, or Bicknell. Drilling of the proposed wildcat well will benefit Wayne County economy through local businesses (motels, cafes, service stations).

7. Outdoor Recreation

There will be very little impact on outdoor recreation from the drilling activity. The improved roads may slightly increase use in the area, however there is little to attract people.

8. Natural Beauty

The drill site will be cleared of vegetation and leveled, and .1 mile of new road constructed. These will be the only long term impacts on natural beauty of the area. The drill rig and associated equipment will have a detrimental impact on natural beauty for the short term (60 days), however smoothing over and reseeded the drill site when the job is completed will minimize the long term impact.

9. Wilderness

There is no wilderness existing or proposed that will be affected by the proposed drilling.

10. Timber

There will be no timber cut, or any impact on the timber resource by this project.

11. Range

The access road to the drill site will cross portions of the Dark Valley cattle allotment, and the site will be within the Lake Philo sheep allotment. The grazing season for cattle is 6/16 to 10/15 and 7/1 to 9/15 for sheep. Sheep feed the area of the drill site a few days each year and then move onto other portions of their range. The area to be taken out of production is small. More impact on livestock will result from the increased travel on the roads across the open range. All fences except one have cattleguards on the access road. The gate in the fence near Hay Lakes is in poor condition and not serviceable. The drill site will be restored to near natural condition when project is complete.

12. Historical and Archeological

The only areas that will be disturbed are .1 mile of new road and the 425' x 450' drill site. These areas have been thoroughly inspected by archeologist Larry Davis, and nothing of historical or archeological significance was found.

13. Mineral and Energy Resources

If a producing oil field is located, an Environmental Statement for the development of the area will be necessary to minimize conflicts with other forest resources and uses, and to look at alternatives and select the best one. The U. S. Geological Survey will be the lead agency in EIS preparation.

14. Transportation

The road betterment necessary to move heavy equipment and provide access to the site will improve 15.25 miles of Forest System roads. 6.25 miles of the Bicknell-Escalante Road and 9 miles of the Hay Lake Road will receive spot surfacing and improvements as necessary. When the project is completed, .1 mile of new construction into the drill site will be ripped, spread, and top soil replaced, and site restored to as natural a condition as possible. Borrow material will be taken from existing pit near Dog Lake. It will have to be reopened and then closed at the end of the job.

15. Public Safety

The drilling activity will cause a marked increase in traffic on the Bicknell-Escalante road and Hay Lake road. Adequate signing will be necessary to provide for safety of the other road users.

16. Fire

The area lies at a high elevation and usually receives frequent precipitation. Wild fire potential is low. Adequate precautions will be taken to prevent escape of waste fires, fires from welding or equipment.

IV. Summary of Probable Adverse Environmental Impacts that Cannot be Avoided.

There will be impacts of a temporary nature that cannot be avoided due to noise of equipment, periodic burning of waste, vehicle exhaust emissions and dust. Other unavoidable impacts are the disturbance of soil and vegetation of the drill site and access roads. These impacts will be minimized by following prescribed regulations on mufflers, emission control, burning permits, revegetation of disturbed areas, approved road construction methods and watering dust when necessary.

V. Relationship Between Local Short Term Users of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity.

If a producing oil field is brought in, tremendous impacts on the environment could result. If this happens, these impacts will be evaluated in an Environmental Statement for the development. If the site proves to be unproductive, long-term impacts will be minimal. Even though the drill site is smoothed over with top soil and reseeded, signs of man's activity will be present for many years.

A producing oil field will provide future energy for an oil deficient nation. If it is not productive the cost of exploration will be born indirectly by the American public.

VI. Irreversible and Irretrievable Commitment of Resources

There will be no irreversible or irretrievable commitment of resources allocated by the proposed project. If a producing field is located, an Environmental Statement will be necessary and will consider this, as the depletion of oil supplies will be irretrievable.

VII. Alternatives

The only feasible alternative to the proposed wildcat well is not drilling it, or drilling at another location. The proposed drill site is so located that environmental impacts will be minimal and any other site in the area would increase the conflicts with forest resources and users.

Not drilling the well is a valid alternative, however due to the minimal environmental impacts, and the present and projected energy shortages, it is in the best interest of the American people to develop energy where environmentally feasible.

There has been sufficient study the past six years to warrant the drilling of an exploratory well.

VIII. Consultation with Others

This project has been discussed on the ground with the U. S. Geological Survey representative, Ron Alexander, and environmental constraints and coordinating requirements evaluated.

Mark Hilliard, Wildlife Conservation Officer from the Utah Division of Wildlife Resources, is familiar with the area and has no adverse feelings to the project. Clint Peterson, sheep permittee of the drill site, was contacted and felt there would be no major problems for him. The project was also discussed with Derrell Albrecht, Chairman, Wayne County Commission. He was concerned about hauling heavy equipment across the Fremont River, and recommended the Bicknell bridge not be used by heavy trucks. He is in favor of the orderly, planned, development of the county's resources. The feeling in Wayne County is generally in favor of resource development.

Dale Marsh of the Garfield County Commission was also contacted, and he felt the same way, in favor of the orderly development of the county's natural resources. He also requested that the oil company be required to maintain roads and leave them as good as they were prior to the project.

The proposed wildcat drilling project is not controversial or will it have major environmental or economic impacts; public hearings or meetings are not necessary.

IX. Management Requirements and Constraints

The following requirements and recommendations are necessary to insure a minimum impact on National Forest resources and other forest uses.

1. Approve the proposed drilling permit contingent upon the following coordinating requirements.
2. Sprinkle water on roads and drill site if dust becomes excessive.
3. Burn waste only when clearing index is over 500.
4. Equip all equipment with proper muffling devices.
5. Reshape road and install proper drainage.
6. Maintain water in lakes at the level recommended by District Forest Ranger.
7. Construct sump pit of sufficient size to prevent overflow, and seal if necessary.
8. Remove and stockpile top soil when leveling drill site on completion of project.
9. Spread top soil and reseed .1 mile access road and drill site when project is complete with the following seed mix:

<u>Species</u>	<u>Lbs./Acre</u>
Smooth brome	5
Hard fescue	3
Orchard grass	3
Timothy	<u>3</u>
	14

10. Fertilize with ammonium nitrate at the rate of 100 lbs. per acre.
11. Scarify site to smooth and cover seed by pulling a drag over it.
12. Fence drill site from livestock with a net wire fence. Fence will have to be maintained at least three years to allow establishment of vegetation.

13. Install 14' cattleguard and gate in fence near Hay Lake.
14. Maintain historic and archeologic values if any of significance are located.
15. Insure the preparation of an Environmental Statement for development if a producing oil field is discovered.
16. Maintain, improve as necessary, and insure adequate drainage of 15.25 miles of forest system roads that will be used for access to the site.
17. Save top soil, respread, fertilize and reseed barrow pit and .1 mile of access road.
18. Provide at least four signs cautioning the public of increased traffic on the road.
19. Insure all equipment have proper spark suppressors.
20. Prevent wild fires through issuance of burning permits.

X. Environmental Statement Recommendation

The proposed wildcat well drilling project is not controversial nor will it have significant environmental impact. An Environmental Statement is not necessary.

XI. Appendix

1. General location map.
2. Negative Declaration
3. Copy of application to drill well from Shell Oil Company and all supporting data including the following:
 - a. Shell Oil Co.'s application to USGS for oil well exploration drilling permit (USGS Form 97331-G).
 - b. Drilling well prognosis.
 - c. Planned casing, cement and mud programs.
 - d. Plat of proposed oil well Harvey Federal #1-10, T32S, R1E.
 - e. Map showing proposed access to the well.
 - f. Twelve Point Surface Use Plan for well location.

- g. Oil and Gas Lease - Surface disturbance stipulations
- h. Roadway Improvement and Drillsite Construction Plans.
- i. Blowout Prevention, Wellhead and Auxiliary Equipment.
- j. Location Layout Plat.
- k. Archeological Site Survey

PLEASE RUSH

DIXIE NATIONAL FOREST

LEASDALE RANGER DISTRICT

ENVIRON. ANALYSIS
~~WATER QUALITY~~ REPORT

TITLE: SHELL OIL CO. - OIL WELL

DATE RECEIVED: 8-20-75

DATE ROUTED: 8-20-75

ROUTE:

SUPERVISOR.....DATE.....

A. O. [Signature] DATE 8/22/75 Lockwood

TIMBER ✓ 1 DATE 8/20/75

RANGE ✓ 2 DATE 8/21/75

ENGR Jay C DATE 8/26/75 (Zone Land Appraiser)

✓ Landscape Architect DATE 8/28/75 Call CC to 1215

RETURN TO: Bill Sheehan (Zone Land Uses)

COMMENTS:

.....

J.D. Halverson
2000 L...
8-10-75

Environmental Analysis Report
Shell Oil Company Prospective Permit
Tandale Range District, District

1. Status of land covered in EAR should be stated in EAR not assumed. This status should include a statement on the lease and area involved.
2. EAR should require that all mud and cuttings not only be restricted to a mud pit, but should also be covered by an adequate depth of top soil over a depth of 10' or more. Mud can have definite chemical characteristics.
3. EAR should speak to State and/or BLM requirements concerning well hole — cap or plug — if well is unsuccessful. EAR should also speak briefly to potential impact on this specific site, if well is successful. The management requirements and constraints that come into play vary with outcome.

POOR COPY

EAR is good — my only concern is the reliance on assumptions, local knowledge of the area, and the quality of the report.

- 8/25/75

2820 Mineral Lease & Permits

Shell Oil Co. Oil Well (Proposed), 0991, 11-54107, 17-4
Land Status in proposed Use Area.

For the records

I examined the Forest's Land Status Book, concerning status of the land in SW 1/4, NW 1/4 Sec. 17 T32S, R1E, S16. Status is as follows:

A. Status and Encumbrance Map: No encumbrances

B. Status Map Tabular Record

- a. Land Rights: All Rights Reserved
- b. All Rights Reserved: Reserved by the Government
- c. Date of Reservation: 11/20/1907
- d. Authority for Reservation: Proclamation
- e. Encumbrances: None
- f. Remarks: Determination of rights # 100, 9/21/60, Act July 2, 1955 (Pub. Law 307) (30 USC 601-604). Public Law 167, Transfer Rights with Government.

PUBLIC LAW 167

C. Use Restriction Map: Shows no formal withdrawals for specific purposes or reservations made by USFS.

D. Use Restriction Map Tabular Record: Same as C.

The Forest Land Status Book is updated periodically by the R.O. so the above

Review of E.A.R.

Shell Oil ^{Corp} Federal - Harvey Well #110

1. The E.A.R. is well prepared and reflects a good environmental analysis / field inspection, with good cooperation of Shell, USGS and USFS representatives.
2. A complete copy of the OIG lease would be desirable; it will be sent to USFS S.O. for the case file by Bill Jones (telecom 8/27).
3. The Roadway Improvement and Dullets construction plans indicate that a good job of improvement and maintenance is ensured. A map showing the location of each "Station" will be helpful to USFS administrators who inspect work progress. This should be prepared for field use.
4. The Operating Plan by definition in USFS / USGS Memo of Understanding, covers the leased lands. A special-use permit should be prepared, and issued, by the District Ranger, to cover the road improvement, maintenance and use of the national forest lands between the lease boundary and the forest boundary. A penciled draft of the permit has been prepared by

Lease _____

Well No. & Location 1-10 SWNW 10-32s-1E

Barfield Co Utah.

ENVIRONMENTAL IMPACT ANALYSIS - ATTACHMENT 2-B

1. Proposed Action

Shell oil company proposes to drill an oil & gas test well with rotary tools to about 8,000 feet. They also propose to construct drill pad 925' x 350' and dig a reserve pit 100' x 225'. They also propose to construct about 1,000 feet of new access road from existing road and to upgrade about 8 miles of existing road.

2. Location and Natural Setting (existing environmental situation)

The wellsite is in a nearly flat area surrounded by generally rough terrain.

The vegetation is sage brush and native grasses on the location itself although pine and fir timber is within 1500'.

The wildlife is the usual deer, elk and bear with assorted small game and predators.

There are no known endangered species.

There is a grazing allotment on the land and it is considered prime grazing land.

The area is very aesthetically pleasing due to its remoteness.

There are no known historical sites that would be effected and no evidence of archeological sites was noted.

3. Effects on Environment by Proposed Action (potential impact)

The drilling and completion of a dry hole or failure would have little long term effect on the environment. Discovery of an oil or gas deposit would have moderate effect in that the character of the area would be changed. If a discovery is made, very careful planning would be required to avoid serious degradation.

Improvement of roads would benefit the grazing and recreational use of the land in that it would be more easily accessible.

There would be moderate scaring of the now natural pinea, which would require 3-5 years to obliterate.

The drilling and associated traffic will add a minor amount of pollution to the now pure air, as well as temporarily disturbing livestock and wildlife.

4. Alternatives to the Proposed Action

Not Approving the proposed permits.

Denying the proposed permit and suggesting an alternate location where environmental damage would be lessened. No nearby locations could be found that would justify this action.

5. Adverse Environmental Effects Which Cannot Be Avoided

Temporary disturbance of Limestone and
wildlife.

Temporary mess due to drilling activity.

Detraction ~~to~~ From the aesthetics.

Minor induced erosion due to
drilling activity and support traffic.

(See also USFS EAR dtd 8/29/75)

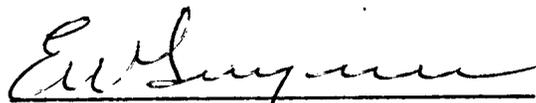
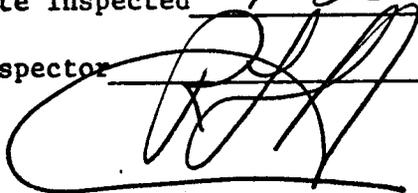
6. Determination

(This requested action (~~is~~) (does not) constitute
a major Federal action significantly affecting the
environment in the sense of NEPA, Section 102(2) (c).

Date Inspected

7-25-75.

Inspector



U.S. Geological Survey,
Conservation Division
Salt Lake City District
Salt Lake City, Utah

SHELL OIL COMPANY
12 POINT SURFACE USE PLAN
FOR
WELL LOCATION
HARVEY FEDERAL NO. 1-10
IN
SECTION 10, T32S, R1E, S.L.B. & M.
GARFIELD COUNTY, UTAH

1. Existing Roads

To reach Shell Oil Company well location Harvey Federal No. 1-10 located in Section 10, T32S, R1E, S.L.B. & M., proceed West on unimproved road from Big Lake, located in Dixie National Forest to Lost Knoll approximately 5 miles; See attached topographic map for exact location of said well. Should it be necessary to improve any existing roads or drainage along or across any existing roads such improvements shall be made as directed by the BLM and the Forest Service. All roads will be maintained as required by the BLM and Forest Service. (See Attachment)

2. Planned Access Road

As shown on the attached topographic map, the planned access road will leave the location on the West side of the location and proceed West for 0.1 miles to existing road. The access road will be a 20' wide road (20' total) with a side drain ditch on each side. Culverts will be placed as needed to maintain normal flow in existing drainages. (See attached topographic map).

3. Location of Existing Wells

As shown on attached topographic map, there are no known wells within a radius of 1 mile.

4. Lateral Roads to Well Locations

See attached topographic map.

5. Location of Tank Batteries and Flowlines

A 500 barrel tank will be set up on the location site to handle condensate in the event production is established. When the well is completed a tank battery will be set up on the location to handle production. There are no plans for any flow lines.

6. Location and Type of Water Supply

The water used to drill this well will be hauled from the Hay Lakes approximately 1 mile to the Northeast. In the event Hay Lakes do not have sufficient water to support drilling operations, water will be hauled from Big Lake, or, if necessary, from Bicknell.

7. Methods for Handling Waste Disposal

All waste that can be burned shall be burned. Any burning deemed necessary will be conducted under favorable weather conditions after receiving permission from the proper governmental authorities. All other waste

shall be buried in a pit and covered with a minimum 2' of cover. There will be a portable chemical toilet supplied for human waste.

8. Location of Airstrips

There will be no airstrips.

9. Location of Camps

There will be no camps.

10. Location Layout

See attached location layout sheet. B.L.M. District Manager will be notified before any construction begins on proposed location site. An archaeologist, Mr. Larry Davis-Boulder, Utah, has been retained to examine the drill site for any objects of historic interest, prehistoric ruins, fossils, etc. prior to any construction work.

11. Plans for restoration of surface

This well is located in an area with good topsoil, all topsoil will be stripped and stockpiled prior to construction and drilling (see attached location layout sheet). When all drilling activities have been completed, the location site area and access road will be reshaped, the stockpiled topsoil spread over the disturbed area and reseeded with a seed mixture as recommended by the B.L.M. District Manager.

12. Topography

The area surrounding the well location is generally rough terrain consisting of steep hill sides, draws, and drainages, with some flat country. Burning will be held to a minimum, as per B.L.M. instructions. Anyone burning will be held responsible to any damage incurred. The vegetation consists of pine, sagebrush and grass. A drainage parallels the location Southeast about 500'. Care will be taken to prevent contamination.

13. General

Attached is a copy of "Supplemental Stipulations" to Shell Oil Company's Oil and Gas Lease. These stipulations will be adhered to. Additional comments by Shell are on this attachment.

C. L. Creager

C. L. Creager

Staff Environmental Specialist

SUPPLEMENTAL STIPULATION TO
STIPULATION FOR LANDS UNDER JURISDICTION OF DEPARTMENT OF AGRICULTURE
OIL AND GAS LEASES

To be attached to and made a part of Form 3109-3.

A. Before beginning of any clearing, construction, or operations, including access and work road location and construction, the lessee shall prepare a "Lessee Surface Management Operating Plan." This plan should be prepared after consultation with the District Ranger or Rangers in whose District the work will be done. The final plan shall be submitted in triplicate to the Forest Supervisor, Dixie National Forest, 500 South Main Street, Cedar City, Utah 84720, for final approval at least 3 weeks before any operations are to be commenced under the plan. Such approval will be conditioned on reasonable requirements needed to prevent soil erosion, water pollution, and unnecessary damages to the surface vegetation and other resources of the United States and to provide for the restoration of the land surface and vegetation. The plan shall contain all such provisions as the Forest Service may deem necessary to maintain proper management of the lands and resources within the operating area and must be in harmony with the provisions of the National Environmental Policy Act of 1969 and the Environmental Quality Act of 1970 as amended.

Where appropriate, depending upon the location and type of operation, the Forest Supervisor may require the plan to contain, but not be limited to, the following items:

1. The location, construction specifications, maintenance program, and estimated use by the lessee, his employees, and agents, of all access and work roads.

Comment: All roads will be constructed and maintained in good condition as required by the BLM and Forest Service.

2. The exact location and extent of any and all areas on which there will be surface disturbance during the operations, including a suitable map or aerial photograph which shows topographic, cultural, and drainage features involved.

Comment: All areas to be disturbed and drainage features are shown on the attached topographic map.

3. The methods to be used in the operations, including disposal of waste material.

Comment: See 12-Point Plan

4. The size and type of equipment to be used in the operation.

Comment: See equipment layout diagram.

5. The capacity, size, character, standards of construction, and location of all structures and facilities to be constructed.

Comment: No permanent structures or facilities are to be constructed at this time.

6. Typical profiles of cuts and fills of all areas to be graded for the installation of structures and facilities.

Comments: Do not anticipate any major earth moving projects; however, for all earth moving projects will obtain prior approval of the BLM and Forest Service.

7. The location and size of areas upon which vegetation will be destroyed and/or soil laid bare and the steps which will be taken to prevent and control soil erosion thereon, including but not limited to the proposed program for rehabilitation and revegetation of these disturbed lands both during and upon cessation of operations.

Comment: See 12-Point Plan

8. The steps which will be taken to prevent water pollution.

Comment: Drilling fluids will be contained in steel mud pits and in a properly constructed earthen reserve pit. Blowout prevention equipment will be used to control the well.

9. The name, address, and telephone number of the lessee, and of the designated field representative of lessee who will be responsible for operations under the lease.

Comment: Lessee: Shell Oil Company, 1700 Broadway, Denver, Colorado 80202
(303) 572-2525 (Attn: B. G. Jones/Drilling Superintendent)
Field Representative: To be determined. Will notify when selected. Meanwhile contact B. G. Jones

10. The character, amount, and time of use of explosives or fire, including safety precautions which will be taken during their use.

Comment: Do not anticipate use of any explosives or fires except perhaps to burn certain waste materials. If any waste materials are to be burned, such burning will be done under favorable weather conditions after obtaining approval from the proper governmental authorities.

11. Forest user, permitted livestock and fish and wildlife protection.

If later operations require departure from or additions to the approved plan, these revisions or amendments, together with justification statement for proposed revisions, will be submitted to the District Ranger for approval of the Forest Supervisor at least 3 weeks before operations under the proposed revision or amendment are to begin.

If in the judgment of the Forest Supervisor later exploration work or other developments require modification of an approved plan, the Forest Supervisor may require the operator to make reasonable revisions or amendments thereunder in accordance with the foregoing principles.

Any and all operations conducted in advance of approval of an original, revised, or amended operating plan, or which are not in accord with an approved plan, constitute a violation of the terms of this lease and the Forest Service reserves the right to close down the operation until such corrective action, as is deemed necessary, is taken by the lessee.

Comment: Any deviation from approved plans will be discussed with and approved by the Forest Service prior to implementation.

B. Upon abandonment, relinquishment, termination, or cancellation of this lease, the lessee shall, within 90 days, remove all its structures and improvements unless otherwise agreed in writing or in this lease. If the lessee fails to remove all such structures or improvements within such period, they shall become the property of the United States, but the lessee shall not thereby be relieved of liability for the cost of their removal and for restoration of the site.

Comment: Understood - will comply

C. To guarantee the successful rehabilitation and revegetation of abandoned operating areas, as provided for in the "Lessee Surface Management Operating Plan," paragraph (A) above, the Forest Service is agreeable to the reduction of lease or operator bonds provided in the basic lease to which this supplement is attached to an amount necessary to cover the estimated cost of rehabilitation and revegetation as determined by the Forest Service, providing, that the lessee has otherwise satisfied the conditions of this lease and the United States Geological Survey and the Bureau of Land Management have approved such a reduction.

In lieu of bond, the lessee may upon mutual agreement with the Forest Supervisor deposit cooperative funds sufficient to cover the cost of rehabilitating and revegetating abandoned operating areas. When such funds have been deposited, the Forest Supervisor shall notify the United States Geological Survey that the requirements of the Forest Service have been satisfied, providing that all other conditions of the lease which concern the Forest Service have been satisfied.

Comment: Understood - See 12-Point Plan

D. Lessee shall not use the land embraced within this lease for purposes other than the exercise of the rights conferred by this lease.

Comment: Understood - will comply.

4

E. The provisions of these stipulations shall be binding upon any successors, sublessees, or assignees of lessee, to the same extent as upon the original lessee, provided, however, that no sublease or assignment shall operate to relieve lessee of his obligations hereunder incurred prior to such sublease or assignment.

Comment: Understood - will comply

F. When American antiquities or other objects of historic or scientific interest, including but not limited to historic or prehistoric ruins, fossils, or artifacts, are discovered in the performance of this lease, the items or conditions will be left intact and the discovery will be immediately brought to the attention of the Forest Supervisor, in accordance with the provisions of the Antiquities Act of 1906 (34 Stat. 225; 16 USC 433).

Comment: Shell Oil Company will comply. Shell has retained an archaeologist, Mr. Larry Davis - Boulder, Utah, to inspect the site prior to any construction operations

OIL AND GAS LEASE - SURFACE DISTURBANCE STIPULATIONS

1. Notwithstanding any provision of this lease to the contrary, any drilling, construction or other operation on the leased lands that will disturb the surface thereof or otherwise affect the environment (hereinafter called "surface disturbing operation") conducted by lessee shall be subject, as set forth in this stipulation, to the prior approval of such operation by the proper official of the Geological Survey in consultation with the appropriate surface management agency and to such reasonable conditions, not inconsistent with the purposes for which this lease is issued, as the Geological Survey may require to protect the surface of the leased lands and the environment.

Comment: Prior construction inspection by U.S.G.S., Forest Service, Archaeologist and Shell representatives was made on July 25, 1975.

2. Prior to entry upon the land or the disturbance of the surface thereof for drilling or other purposes, the lessee shall submit for approval two copies of a map and explanation of the nature of the anticipated activity and surface disturbance for all counties in Utah other than San Juan County to the District Engineer, Geological Survey, 8416 Federal Building, 125 South State Street, Salt Lake City, Utah 84111, and for San Juan County to the District Engineer, Geological Survey, 3473 North Main Street, P. O. Box 1809, Durango, Colorado 81301, and will also furnish the appropriate surface management agency (over) with a copy of such map and explanation.

An environmental analysis will be made by the Geological Survey in consultation with the appropriate surface management agency for the purpose of insuring proper protection of the surface, the natural resources, the environment, existing improvements, and for assuring timely reclamation of disturbed lands.

Comment: Understood - will comply.

3. Upon completion of said environmental analysis, the Geological Survey shall notify lessee of the conditions, if any, to which the proposed surface disturbing operations will be subject. Said conditons may relate to any of the following:

(a) the location of drilling or other exploratory or developmental operations or in the manner in which they are to be conducted;

(b) the types of vehicles that may be used and the areas in which they may be used; and

(c) the manner or location in which improvements such as roads, buildings, pipelines or other improvements are to be constructed.

(d) no occupancy of the surface of Secs. 1 and 11, N $\frac{1}{2}$ Sec. 12, T32S, R1E, SLM, Utah, is authorized by this lease. The lessee, however, is authorized to employ directional drilling to exploit the oil and gas resources provided that such drilling will not disturb the surface of the area or otherwise interfere with the use being made of it.

Comment: Understood - will comply

C. In addition to areas that may be specified by special stipulations and made part of this lease, no occupancy of the surface of the following areas is authorized by this lease. The lessee is, however, authorized to employ directional drilling to develop the mineral resources under these areas provided that such drilling or other works will not disturb the surface area or otherwise interfere with their use by the Forest Service. It is understood and agreed that the use of these areas for National Forest purposes is superior to any other use. The minimum areas to be excluded from direct drilling occupancy are:

1. Within 500 feet on either side of the centerline of any and all roads and/or highways within the lease areas.
2. Within 200 feet on either side of the centerline of any and all Forest Service trails within the lease area.
3. Within 500 feet of the normal highwater line of any and all lakes, ponds, and reservoirs located within the lease area.
4. Within 500 feet of the normal highwater line of any and all streams in the area.

The distance in subparagraphs 1, 2, 3 and 4 immediately above may be reduced when specifically agreed to in the operating plan, see paragraph (a).

5. Within 400 feet of any and all springs within the lease area.
6. Within 400 feet of any improvements either owned; permitted, leased, or otherwise authorized by the Forest Service.

Comment: Understood - will comply

ROADWAY IMPROVEMENT AND DRILLSITE CONSTRUCTION PLANS
SHELL-HARVEY-FEDERAL 1-10
SEC. 10, T32S, R1E
GARFIELD COUNTY, UTAH

The proposed Drillsite for the above well is located in a relatively flat, high meadow with existing vegetation consisting primarily of bunch grass and scrub sagebrush. Access to the area (except the last $\pm 1000'$) is by existing roadways already in the area.

Below are listed the various drillsite and road improvement plans with a brief description of the work required to accomplish the goal.

The necessary work and the plans to implement same were discussed between Mr. Jack Voris, District Engineer, United States Forest Service, Panguitch, Utah, and Mr. Bill Jones of Shell Oil Company on July 28-29, 1975, during a field inspection of the proposed work area.

I. Improvement of existing roadway and construction of $\pm 1000'$ of new roadbed:

- A. Stations below were taken from existing footage markers, beginning at the cattle guard at the entrance to Dixie National Forest in the southern half of Sec. 8, T31S, R2E, Garfield County, Utah.

<u>Station No.</u>	<u>Work Description</u>
130 + 00 to 137 + 00	Cap existing roadway with pit-run topping to a depth of 4" x 14' wide.
167 + 32	Install by-pass and gate around existing cattle guard.
187 + 90	Construct dip across existing roadway and flare drainage ditch to right of roadway
198 + 50 to 239 + 00 (Big Lake Turn-Off)	Cap existing roadway with pit-run topping to a depth of 4" x 14' wide.
239 + 00	Improve drainage ditch to right side of roadway; construct catch basin on right side of roadway; install 11" x 29" squash CMP by 30' long and cover CMP with 12" of cover.

- B. Stations listed below were taken from the intersection of the Forest Service Road at Big Lake (Station 239 + 00) and the existing Forest Service Road to Hay Lakes and using an automobile odometer to measure mileage.

<u>Station No.</u>	<u>Work Description</u>
Big Lake Turn-off To 7.50 mile station	Cap existing roadway with pit-run topping to a depth of 4" x 14' wide.

- 0.15 Clean out catch basin and open up both ends of existing 18" CMP drain.
- 0.35 (-50') Construct turn-out 27' w x 81' l and fill low spot in roadway.
- 0.35 Clean out ends of existing 18" CMP drain. Construct catch basin on right side of roadway and clean out ditch to catch basin.
- 0.50 Clean out catch basin at existing 18" CMP drain.
- 0.65 Clean out ends of existing 18" CMP
- 1.00 Clean inlet and outlet of existing 18" CMP drain and cut outlet ditch.
- 1.00 (+20') Fill hole w/±20 yd³ material.
- 1.60 Construct intercepting dip, angling to and dipping toward right side of roadway.
- 1.70 Existing 18" CMP-No Work required
- 2.05 Existing 18" CMP drain-clean inlet and outlet and cut drainage ditch. Cap top of thin cover over existing CMP w/6" pit run gravel.
- 3.15 Construct dip angling to right and cut drainage ditch to right
- 4.35 Cap top of existing 18" CMP with 6" of pit run gravel
- 4.50 Existing 18" CMP-no work required
- 5.20 Cut ditches on both sides of roadway to provide drainage in/out of existing 18" CMP. Fill low spots in roadbed in area and bring roadbed up to same level w/top of cover on existing 18" CMP.
- 5.35 Install 16' wide cattle guard and 12' wide by-pass gate in fence line. Cattle guard construction and installation to meet U.S.F.S. specs for H-20 loading as per drawing no. FR-4601 as revised March, 1967. Gate construction and installation to meet U.S.F.S. specs as shown on drawing nos. FR-7701 and FR-7601.
- 7.50 Beginning of roadway to drillsite

7.50 to 7.75

Construct new roadbed by removing existing large, loose boulders from route. No excavation required. Place 6" (x 14' width) of pit-run gravel on top of existing vegetation. Leave roadbed higher than surrounding terrain.

II. Construct Drillsite:

- A. The drillsite, as shown on the attached drawing, will be constructed using a cut and fill operation to balance out the material on the site. Topsoil will be stockpiled for restoration purposes following the completion of drilling. Shallow, round bottom drainage ditches will be constructed around the northerly and westerly edges of drillsite to prevent drainage from entering the location.
- B. Reserve pits will have a dike around them to prevent drainage from entering and to avoid any accidental overflow.

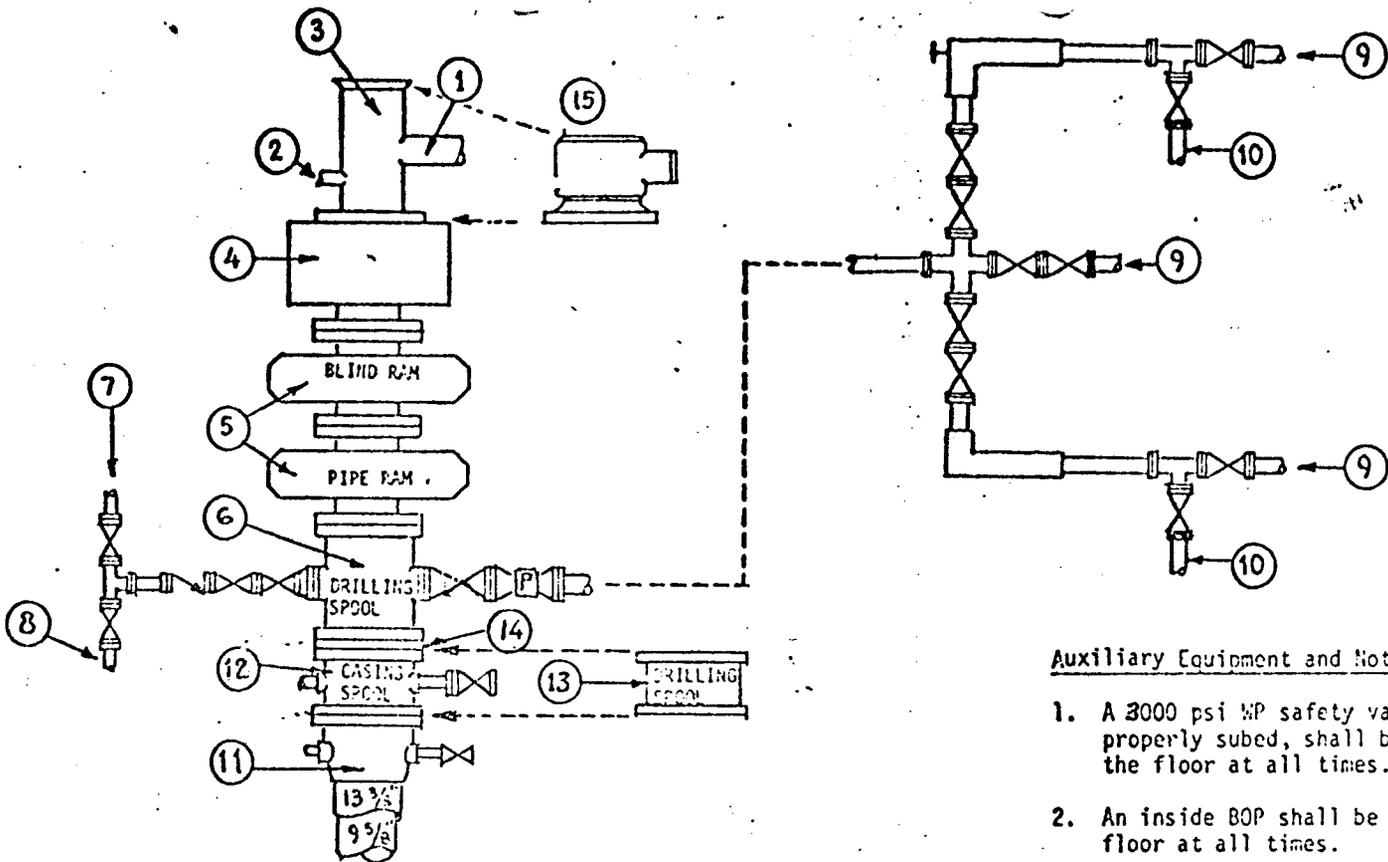
III. Type-sources for fill and road topping material:

Material will be trucked from an existing pit (now closed) ±350' west of Station No. 130-50. Testing of the pit reveals that there is an estimated 10,000 yd³ of pit-run gravel available from this site, while the estimated requirements for the road improvement is 8,000 yd³.

Following the completion of removal of gravel from this pit (or any other pit as specified by the U.S.F.S.) the pit sides will be sloped, the bottom graded and the entire area re-seeded after the top soil that was removed in opening the pit has been distributed over the pit area.

- IV. Roads will be maintained during operations and left in the aforementioned improved condition.

BLOWOUT PREVENTION, WELLHEAD, AND AUXILIARY EQUIPMENT



Auxiliary Equipment and Notes:

1. A 3000 psi WP safety valve, properly subed, shall be on the floor at all times.
2. An inside BOP shall be on the floor at all times.
3. An upper kelly cock to be used at all times.
4. Pipe rams shall be sized to match the drillpipe or casing being run in the hole.
5. Mud system monitoring equipment will be installed (with derrick floor indicators) and used throughout the period of drilling after mud up.
6. BOP equipment shall be pressure tested upon installation and periodically thereafter. Operational test of ram type preventers shall be performed on each trip.

Item No.	Description
1	Mud return flow line
2	Fillup line - min. 2"
3	Drilling Nipple
4	12" - 3000 psi WP-Annular Bag Type BOP - Shaffer or Hydril
5	Two single or one dual - hydraulically operated - 12" - 3000 psi WP - Ram Type BOP - Cameron or Shaffer LWS
6	12" - 3000 psi WP Drilling Spool
7	To mud pumps
8	To remove pump in station
9	To burn pit
10	To gas buster
11	12" - 3000 psi WP-Slip On and Weld-Casing Head
12	12" - 3000 psi WP x 12" - 3000 psi WP Casing Spool
13	12" - 3000 psi WP x 12" - 3000 psi WP Drilling Spool - While Drilling 12-1/4" hole
14	12" - 3000 psi WP - Wear Flange or Bushing
15	Rotating Head while using air

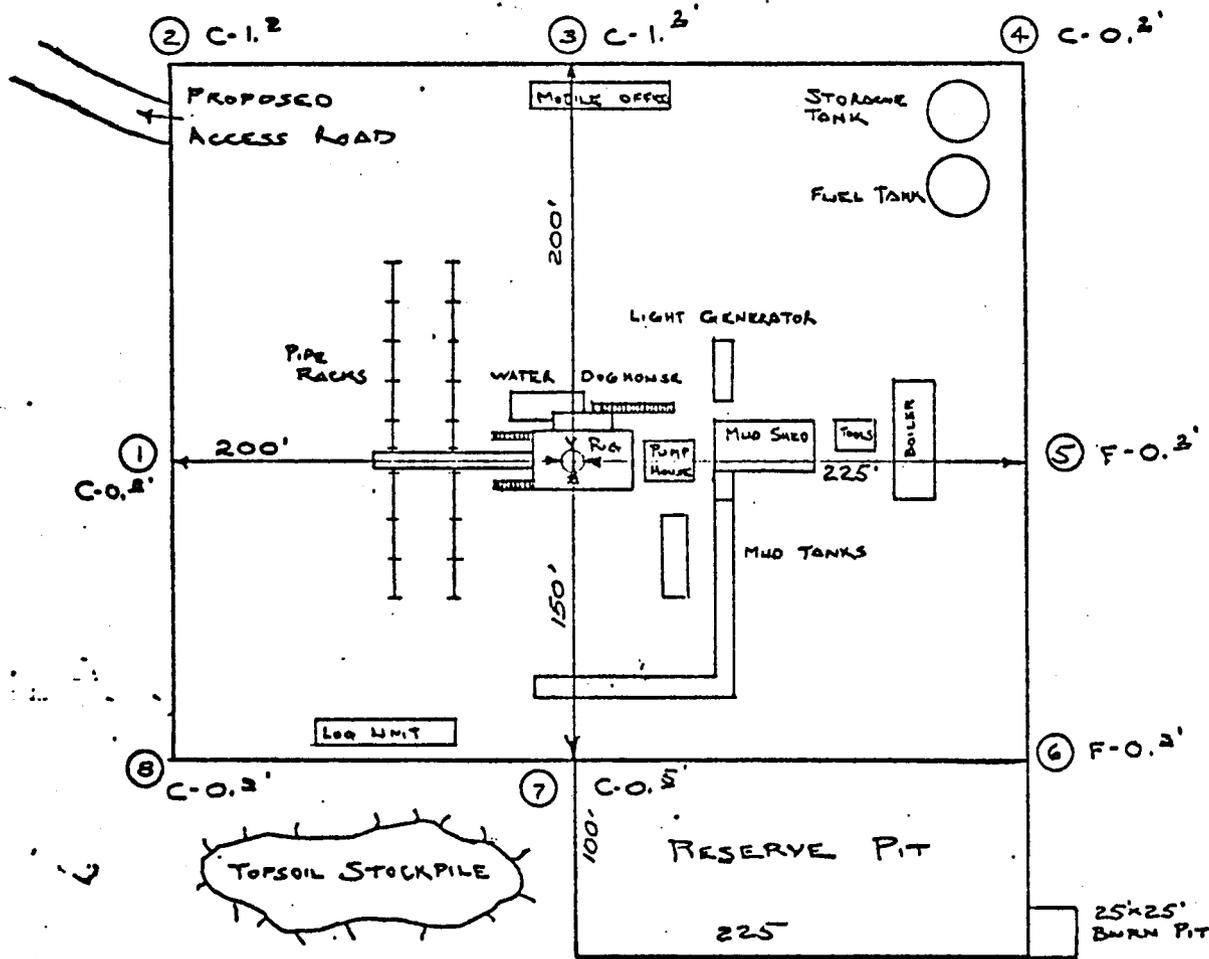
Well Name FEDERAL 1-10

Field ZINC AREA W.C.

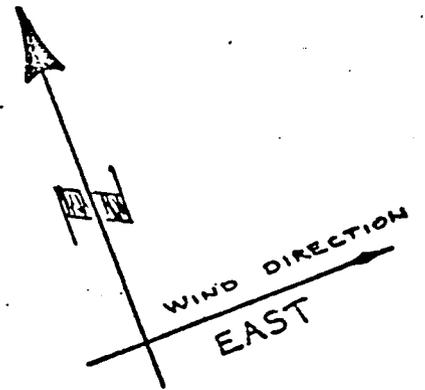
County GARFIELD

State UTAH

Attachment No. _____



SHELL OIL COMPANY
 LOCATION LAYOUT
 IN
 SECTION 10, T32S, R1E, SLB & M



REF. POINT ELEV.
 250' NE - 9749.76'
 300' NE - 9751.53'

DATE 7-22-75
 SCALE 1" = 100'

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

9

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

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

2. NAME OF OPERATOR
 Shell Oil Company

3. ADDRESS OF OPERATOR
 1700 Broadway, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
 At surface
 633' FWL and 1476' FNL Section 10
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 Approx. 35 miles from Bicknell

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 633'

16. NO. OF ACRES IN LEASE 2560

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. No other wells

19. PROPOSED DEPTH 8000'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 9747 Ungraded GL

22. APPROX. DATE WORK WILL START*
 9/1/75

5. LEASE DESIGNATION AND SERIAL NO.
 U-20707

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
 Shell Federal

8. FARM OR LEASE NAME
 Harvey *26*

9. WELL NO.
 1-10

10. FIELD AND POOL, OR WILDCAT
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 SW/4 NW/4 Section 10-T32S-R1E

12. COUNTY OR PARISH 13. STATE
 Garfield Utah

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2	13-3/8"	54.5#	300'+	To surface
12-1/4	9-5/8"	36#	4000'+	To surface

ATTACHMENTS:

- Drilling Prognosis
- Certified Survey Plat
- Road & Topo Map
- 12 Pt Land Use Plan
- Supplemental Stipulation to Land Use Plan
- Road Construction and Maintenance Plan
- BOPE Drawings
- Location Layout Plat

Approval Notice: Utah State Oil & Gas Comm.

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 *J.W. Linnel* TITLE Div. Opers. Engr. DATE 7/30/75

(This space for Federal or State office use)

PERM'T NO. _____ APPROVAL DATE _____

APPROVED BY *E. J. ...* TITLE _____ DATE SEP 1 1975

CONDITIONS OF APPROVAL, IF ANY:

cc: Utah Oil and Gas Conservation Commission (2)
 Dixie Nat'l Forest, Forest Supvr., Cedar City, Utah (3)
 *See Instructions On Reverse Side

DIVISION OF OIL, GAS, AND MINING

FILE NOTATIONS

Date: Aug 7-
 Operator: Shue Oil
 Well No: Harley 1-10
 Location: Sec. 10 T 32S R. 01E County: Garfield

File Prepared Entered on N.I.D.
 Card Indexed Completion Sheet

Checked By:

Administrative Assistant: [Signature]
 Remarks: 2-7. Called Shue on Thursday location, location picked by 21563 & Trust Service - Shue done all acreage w/in 660' - will send letter
 Petroleum Engineer/Mined Land Coordinator: [Signature]
 Remarks: 7
 Director: [Signature]
 Remarks:

Include Within Approval Letter:

Bond Required Survey Plat Required
 Order No. Blowout Prevention Equipment
 Rule C-3(c) Topographical 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

August 7, 1975

Shell Oil Company
1700 Broadway
Denver, Colorado 80202

RE: WELL NO. SHELL FEDERAL HARVEY 1-10
Sec. 10, T. 32 S, R. 1 E,
Garfield County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure. Said approval is, however, conditional upon forwarding this office a statement as to the reason for said unorthodox location and indicating that your company owns or controls all the acreage within a 660 foot radius of the proposed site.

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

PATRICK L. DRISCOLL - Chief Petroleum Engineer
HOME: 272-5813
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.

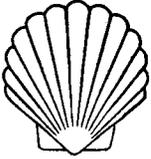
The API number assigned to this well is 43-017-30069.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT
DIRECTOR

CBF:sw
cc: U.S. Geological Survey



SHELL OIL COMPANY

1700 BROADWAY
DENVER, COLORADO 80202

August 7, 1975

Re: Well No. Harvey Federal 1-10
Sec. 10, T32S, R1E
Garfield County, Utah

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

Attention Cleon B. Feight, Director

Gentlemen:

We wish to apply for an acceptance to Spacing Requirement Rule C-3 for the Harvey Federal 1-10 Well located in Section 10, T32S, R1E, Garfield County, Utah. The well location was positioned 504' North of a legal location primarily to minimize environmental damages and to meet with approval of the U. S. Forest Service.

Shell Oil owns or controls all acreage within 660' of the proposed well.

Very truly yours,

L. G. Roark
Division Operations Manager
Rocky Mountain Operations Office

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

500 South Main
Cedar City, Utah 84720

2820
August 29, 1975



Mr. E.W. Gynn, District Engineer
Oil and Gas Operations
U.S.G.S. Conservation Division, 8426 Federal Bldg.
125 South State Street
Salt Lake City, Utah 84138

Dear Mr. Gynn:

Enclosed is a copy of the approved Environmental Analysis Report for the well proposed by Shell Oil Company on Oil and Gas Lease #U-20707, Teasdale Ranger District, Dixie National Forest. We feel that an EIS is not needed, and a negative declaration is attached.

The EAR, and Surface Management Operating Plan, were both carefully reviewed by our staff specialists. Their comments are also enclosed for your information.

The Forest Service approves of the project, subject to the Management Requirements and Constraints in the EAR.

Teasdale District Forest Ranger Ted Knowles is the Forest Officer authorized by the Forest Service to act as its local representative. He is preparing a special use permit to cover use of National Forest lands by Shell outside of the lease boundary.

We continue to adhere closely to the new USGS/USFS Memorandum of Understanding.

William Sheehan

For
RALPH S. RAWLINSON, Chief
Branch of Lands Management

Enclosure

File
Shell
Harvey 1-10
Gayfield

III. Environmental Impact

With proper planning and permit administration, drilling the proposed oil well will have little impact on other forest resources and uses. The drill site will be 425' x 450' requiring a maximum of 2' cuts and fills to level. Fifteen miles of system road will be improved through spot gravelling and improved drainage. Five hundred fifty feet of 14' wide access road will be constructed between the existing road and the drill site. The travel and activity around the drill site will have a slight impact on livestock and wildlife; they will move away from areas where they are disturbed. As much as 15,000 gallons of water may be required daily. Water sources may not be available in the area at the time drilling is done. Water may have to be hauled from off forest.

1. Air

The air in the vicinity of the proposed well site is presently clean and pure with no known local pollution. Construction activity, travel on the access roads, power for the drill rig will degrade air quality through engine exhaust emissions and dust. Smoke from burning wastes will also degrade air quality unless burned when atmospheric conditions are such that rapid smoke dissipation is possible.

The noise level will also increase many times as the activity increases. With exception of an occasional motor vehicle, there is presently little noise in the area.

2. Soil

The soil of the area is relatively stable, and because soil disturbing activities will occur on areas with little or no slope, erosion potential is low. Light amounts of sheet erosion is occurring on the area. The existing road is not adequately drained and contributing to the soil loss in several areas. Water accumulation and improper drainage on the new road and drill pad could increase soil loss if not properly drained.

3. Water

There is no live water in the vicinity of the drill site, or close to proposed road. Of primary concern is where water used in the drilling operation (15,000 gallon per day) can be obtained. If it is hauled from the nearby small lakes, sufficient water must be left to meet wildlife and livestock needs. Depending on when drilling commences, the bulk of the water will probably have to be hauled from the Fremont River. The oil company will have to make arrangements with the irrigation

I. Summary of Proposed Project

Shell Oil Company proposes to drill a wildcat well, designated Harvey-Federal #1-10, Lease U-20707, on the Teasdale Ranger District, Dixie National Forest. This is the result of several years of study by various companies which included seismograph, vibroseis, electro-telemagnetic, and magnometer surveys. The tentative plans call for a 8,000 foot well to be completed over a sixty day period. The starting date has not been set; it will depend on when a drill rig is available. A winter operation is not planned.

II. Description

The proposed drill site is in the Antelope Springs Management Area of the Aquarius Planning Unit. It is in the NW $\frac{1}{4}$, Section 10, T32S, R1E, SLB&M, Garfield County, Utah. It is on the north end of the Aquarius Plateau, approximately 35 miles south of Bicknell, Utah. The proposed site lies in a large, flat, closed basin at an elevation of 9750 feet. Vegetation on and adjacent to the site consists of silver sagebrush and grass. The drill site has a slight southerly aspect, and with the exception of a small livestock pond one mile south of the site, there is no live water in the vicinity.

Climate is harsh; there are less than 60 frost free days. The mean maximum temperatures for July and January are 76 $^{\circ}$ and 32 $^{\circ}$ and mean minimum are 48 $^{\circ}$ and 6 $^{\circ}$. Average annual precipitation is 20", coming as winter snow and late summer rain.

The area is grazed by one band of sheep for a few days each year, and provides summer range for a small number of deer and antelope. Predators, small game and other animals and birds also summer in the area.

Soils are deep, gravelly loams and gravelly clay loams. Parent materials are andesite, latite, basalt, and mixed alluvium from these materials. Erosion potential is low. A system road runs within 550' of the site.

The purpose of this environmental analysis report is to insure implementation of appropriate requirements outlined in the EAR for Mineral Leases on the Teasdale Ranger District, and to provide special coordination as necessary to minimize the impact of the proposed project on other forest resources and uses.

The drilling permit will be issued by the U. S. Geological Survey Conservation Division, 8426 Federal Building, Salt Lake City, Utah 84138 - E. W. Guyman, District Engineer.

The leasee is Shell Oil Company, 1700 Broadway, Denver, Colorado 80202 - B. G. Jones, Drilling Superintendent.

USGS
copy

NEGATIVE DECLARATION

Shell Oil Company, Drilling
Lease #U-20707
Teasdale Ranger District
Dixie National Forest

The proposed activity is not considered to be a major Federal action significantly affecting the quality of the human environment (requiring an Environmental Statement pursuant to Section 102 (2) (C) of the National Environmental Policy Act of 1969 (OL91-190) or to be highly controversial. Those actions that could adversely affect the quality of the physical and biological components in the project and will be sufficiently minimized to prevent long-term environmental impacts. Overall social and economic effects of the proposal are considered to be beneficial. Consultation with others on the proposed project did not reveal significant adverse reaction. These determinations are based upon evaluations made in the attached Environmental Analysis Report.

However, if the wildcat drilling is successful in finding an oil and gas reservoir which will result in additional wells being drilled or transmission lines constructed, this development will be a major Federal action, requiring the preparation and submission of an Environmental Statement.

By:  Date: 8/28/75

ENVIRONMENTAL ANALYSIS REPORT

2820

Shell Oil Company Prospecting Permit

Teasdale Ranger District, Dixie National Forest, Region 4

Report prepared by Todd Brown Date 8/15/75
District Forest Ranger

Approval of report recommended by Robert L. Rasmussen ^{R-3 Branch} Date 8/28/75
Title

Report approved by M. J. Bishop ^{F.S.} Date 8/28/75
Title

the Forest Resource Clerk and is being returned with the approved EAR to Ranger Knowles. He should incorporate the "Roadway Improvement and Drilling Construction Plans in the Permit specifying what portion of the plan applies to the permit. Also, any other work agreed to (such as erosion control along roads) should be specified in permit. The permit can be issued by Ranger Knowles with the signature of Mr. Bill [unclear] as Special Agent in Charge. The permit will simply be a documentation of agreements.

5. The EAR addresses itself to a sixty-day and fair weather exploration project. What happens if there is a delay caused by the request being available for drilling problems? What if a discovery is made and full scale development is requested? Will the operation go into winter months, if so is snow plowing scheduled. If the road gets extremely soft, are there provisions for a shutdown? These questions have probably been discussed, but documentation should be made.

W. A. Sheehan, Land Use Forester
Minerals Area Mgt., S.O.

8-28-75

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIP
(Other instructions
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.)

<p>1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER</p> <p>2. NAME OF OPERATOR Shell Oil Company</p> <p>3. ADDRESS OF OPERATOR 1700 Broadway, Denver, Colorado 80202</p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 633' FWL & 1476' FNL Section 10</p>		<p>5. LEASE DESIGNATION AND SERIAL NO. U-20707</p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</p> <p>7. UNIT AGREEMENT NAME Shell-Federal</p> <p>8. FARM OR LEASE NAME Harvey</p> <p>9. WELL NO. 1-10</p> <p>10. FIELD AND POOL, OR WILDCAT Wildcat</p> <p>11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SW/4 NW/4 Section 10-T32S-R1E</p>
<p>14. PERMIT NO.</p>	<p>15. ELEVATIONS (Show whether DF, RT, GR, etc.) 9747 Ungraded GR</p>	<p>12. COUNTY OR PARISH Garfield</p> <p>13. STATE Utah</p>

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 checked="" type="checkbox"/>	(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.)*

Initial plans were to set 300' 13-3/8" surface csg.
Now plan is to set 1000'± or thru volcanics.

Verbal approval rec'd 9-25/75 from Mr. E. W. Guynn

APPROVED BY THE DIVISION OF
OIL, GAS, AND MINING
DATE: Sept 29, 1975
BY: P. H. [Signature]

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

SIGNED J. W. [Signature] TITLE Div. Opers. Engr. DATE 9/25/75

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

cc: Utah Oil & Gas Conservation Commission
Dixie Nat'l Forest, Forest Supvr, Cedar City, Utah
*See Instructions on Reverse Side

UN STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIP
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U-20707

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Shell-Federal

8. FARM OR LEASE NAME

Harvey

9. WELL NO.

1-10

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

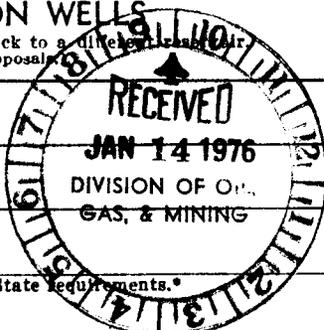
SW/4 NW/4 Section 10-
T32S-R1E

12. COUNTY OR PARISH

Garfield

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 level. Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Shell Oil Company

3. ADDRESS OF OPERATOR
1700 Broadway, Denver, Colorado 80202

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

633' FWL & 1476' FNL Section 10

14. PERMIT NO.

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

9747 GR

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) Suspending Operations

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

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

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.)*

Verbal approval to suspend operations received from Mr. E. W. Guynn

TD 5140

13-3/8" csg @ 1066' cmt'd w/700 sx (circulated)

9-5/8" csg @ 1860' cmt'd w/400 sx

Fish #1 3027-3744

Fish #2 1807-3019 (53' inside 9-5/8" & cmt'd in place)

Placed 65 sx cmt plug inside 9-5/8" csg. Top of cmt @ 1732. Tested w/600 psi for 2 hrs. Rig released 1/9/76. Will weld plate on 13-3/8" csg and leave location as directed by Forest Service.

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING
DATE: Jan. 15, 1976
BY: [Signature]

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

SIGNED

[Signature]

TITLE Div. Opers. Engr.

DATE 1/13/76

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

2 cc: Utah Oil & Gas Conservation Commission

2 cc: Dixie National Forest Supvr, Cedar City, Utah

*See Instructions on Reverse Side



CALVIN L. RAMPTON
Governor

OIL, GAS, AND MINING BOARD

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

STATE OF UTAH

GUY N. CARDON
Chairman

DEPARTMENT OF NATURAL RESOURCES

CHARLES R. HENDERSON
ROBERT R. NORMAN
JAMES P. COWLEY
HYRUM L. LEE

DIVISION OF OIL, GAS, AND MINING

1588 West North Temple
Salt Lake City, Utah 84116

CLEON B. FEIGHT
Director

July 1, 1976

Shell Oil Co.
1700 Broadway
Denver, Colorado 80202

Re; Well No. Harvey-Fed. 1-10
Sec. 10, T. 32S, R. 1E
Garfield County, Utah

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above referred to well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3 in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

KATHY OSTLER
RECORDS CLERK



CALVIN L. RAMPTON
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

OIL, GAS, AND MINING BOARD

GUY N. CARDON
Chairman

CHARLES R. HENDERSON
ROBERT R. NORMAN
JAMES P. COWLEY
HYRUM L. LEE

September 10, 1976

Shell Oil Company
1700 Broadway
Denver, Colorado 80202

Re: Well No. Shell-Harvey-Federal #1-10
Sec. 10, T. 32S, R. 1E
Garfield County, Utah
SECOND REQUEST

Gentleman:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above referred to well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3 in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

KATHY OSTLER
RECORDS CLERK

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLE
(Other instructions
reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U-20707

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.)

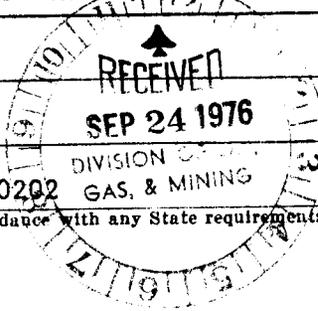
1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Shell Oil Company

3. ADDRESS OF OPERATOR
1700 Broadway, Denver, Colorado 80202

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

633' FWL & 1476' FNL Section 10



7. UNIT AGREEMENT NAME

Shell-Federal

8. FARM OR LEASE NAME

Harvey

9. WELL NO.

1-10

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

SW/4 NW/4 Section 10-
T32S-R1E

14. PERMIT NO.

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

9747 GR

12. COUNTY OR PARISH

Garfield

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

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) Temporary 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.)*

Suspended operations January 1976

Location cleaned up, leveled, reseeded and fenced as per request of Forest Service
A redrill is possible. Water from original cased hole will be used.

If redrill does not take place, welded cap will be removed and cement plug in top of
sfc casing and abandonment marker will be installed.

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

SIGNED

J.W. Kruegel

TITLE Div. Oper. Engr.

DATE 9/22/76

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

Roger

cc: O&GCC - Utah

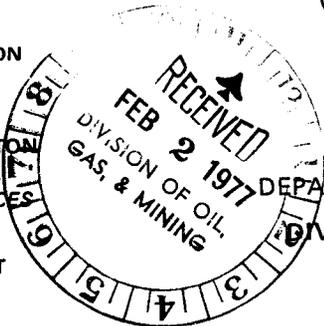
*See Instructions on Reverse Side



CALVIN L. RAMPTON
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

October 27, 1976

OIL, (please see below)

GUY N. CARDON
Chairman

CHARLES R. HENDERSON
ROBERT R. NORMAN
I. DANIEL STEWART
HYRUM L. LEE

J. M. Dunbar
501 Midland Savings Bldg.
Denver, Colorado 80202

Re: Well No. Shell-Harvey-Fed. #1-10
Sec. 19, T. 32S, R. 1E
Garfield County, Utah

Dear Mr. Dunbar:

Upon receiving your request for additional information on above mentioned well, I immediately brought it to the attention of our Petroleum Engineer, P. L. Driscoll.

Mr. Driscoll called Shell Oil Co., and they said that as far as their concerned, it is not completed as yet. There is no information to be reported, but they will send a "Sundry Notice" monthly, stating well is temporarily suspended.

When such report comes in, I will send you a copy. If this office can be of any more assistance, please let us know.

Sincerely,

DIVISION OF OIL, GAS, AND MINING

KATHY OSTLER
RECORDS CLERK

Did you ever receive this Shell report?

Thank you.

J. M. DUNBAR

2-3-77 - phere called Mr. Sumner on this matter & he said he would send reports in (w.c. & progress reports).

April 19, 1977 To:

Ms Kathy Ostler
Div Oil, Gas, Mng
(please see below)

OIL, GAS, AND MINING BOARD

GUY N. CARDON
Chairman

CHARLES R. HENDERSON
ROBERT R. NORMAN
I. DANIEL STEWART
HYRUM L. LEE



K

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
February 3, 1977

This Sundry Notice is dated
Sept. 22, 1976; do you have
anything more current at
this time? Thanks.

J. M. Dunbar
501 Midland Savings Bldg.
Denver, Colorado 80202

Re: Well No. Shell-Harvey-Federal 1-10
Sec. 19, T. 32S, R. 1E
Garfield County, Utah

Dear Mr. Dunbar:

As of today, February 3, 1977, this office has not received any additional data from above mentioned well. I have enclosed the last 'Sundry Notice' we received from them.

Upon bringing this matter to the attention of our Divisions Administrative Assistant, Scheree Wilcox, she immediately called Mr. Kimmel of Shell Oil Company. He said he would send the Well Completion report and progress reports to this office. When they arrive I'll send you copies.

If this office can be of any more assistance, please do not hesitate to call or write.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

KATHY OSTLER
RECORDS CLERK

/ko
Enclosure

J. M. DUNBAR

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

SUBMIT IN TRIPPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U-20707

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.)

7. UNIT AGREEMENT NAME

Shell-Federal

8. FARM OR LEASE NAME

Harvey

9. WELL NO.

1-10

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

SW/4 NW/4 Section 10-
T32S-R1E

12. COUNTY OR PARISH 13. STATE

Garfield

Utah

1. OIL WELL GAS WELL OTHER Wildcat - Dry Hole

2. NAME OF OPERATOR
Shell Oil Company

3. ADDRESS OF OPERATOR
1700 Broadway, Denver, Colorado 80290

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
633' FWL & 1476' FNL Section 10

14. PERMIT NO.

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

9747 GR

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(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.)*

See sundry dated 1/13/76 for hole and plugging data. The well has plate welded on casing and will be turned over to Forest Service for future use as a water well. Location is fenced and cleaned and has been inspected and approved by the USFS.

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

SIGNED

R. Plautz

TITLE Div. Oper. Engr.

DATE 3/23/78

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:



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

OIL, GAS, AND MINING BOARD

I. DANIEL STEWART
Chairman

CHARLES R. HENDERSON
JOHN L. BELL
THADIS W. BOX
C. RAY JUVELIN

August 18, 1978

Shell Oil Company
1700 Broadway
Denver, Colorado 80920

Re: Well No. Shell Federal Harvey 1-10
Sec. 10, T. 32S, R. 1E
Garfield County, Utah

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above referred to well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS, & MINING

Tammy Edge
Typist



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

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

February 7, 1980

Shell Oil Co.
1700 Broadway
Denver, Colo. 80920

RE: Well No. Shell Federal Harvey #1-10
Sec. 10, T. 32S, R. 1E,
Garfield County, Utah
SECOND NOTICE

* The last notice was sent in Aug. 1978
We would appreciate a response as soon
as possible.

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above mentioned well (s) is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

DEBBIE BEAUREGARD
CLERK-TYPIST

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. 4/25/78

5. LEASE DESIGNATION AND SERIAL NO.

U-20707

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Shell-Federal

8. FARM OR LEASE NAME

Harvey

9. WELL NO.

1-10

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC. T., R., M., OR BLOCK AND SURVEY

SW/4 Section 10-T32S-R1E

12. COUNTY OR PARISH

Garfield

13. STATE

Utah

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

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

b. TYPE OF COMPLETION:

NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RESVR. Other _____

2. NAME OF OPERATOR

Shell Oil Company

3. ADDRESS OF OPERATOR

1700 Broadway, Denver, Colorado 80290

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At surface
633' FWL & 1476' FNL Section 10, SW NW
At top prod. interval reported below

At total depth

14. PERMIT NO. DATE ISSUED

43-017-300691

15. DATE SPUDDED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 19. ELEV. CASINGHEAD

9/19/75 12/21/75 TA'd JAN. 76 9747 GR

20. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 25. WAS DIRECTIONAL SURVEY MADE

5140 1732 Total No

26. TYPE ELECTRIC AND OTHER LOGS RUN 27. WAS WELL CORED

No logs run No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48#	1066	17-1/2	700 SX	0
9-5/8	36#	1860	12-1/4	400 SX	0

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)	32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
	DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED
<u>Well plugged and abandoned</u>	

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

RECEIVED
FEB 28 1980

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

DIVISION OF OIL, GAS & MINING

35. LIST OF ATTACHMENTS

Well History

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

SIGNED R. Plaudy TITLE Div. Opers. Engr. DATE 3/23/78

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

March 21, 1980

Shell Oil Company
1700 Broadway
Denver, Colorado 80290

Re: *Plugging Report*
Well No. Federal Harvey #1-10
Sec. 10, T. 32S, R. 1E.,
Garfield County, Utah

Gentlemen:

In reply to a request for well status, we received a well completion report listing the above referenced well as a dry hole -- plugged and abandoned on February 28, 1980 (the report was dated March 28, 1978).

On September 22, 1976, a Sundry Notice indicates that it a redrill does not take place, a welded cap will be removed, a cement plug placed in the top of the surface casing and a regulation dryhole marker installed. We request that a subsequent report of abandonment be filed with this office stating what exactly took place between your Sundry Notice of September 22, 1976, and the report of abandonment of March 28, 1978.

Your immediate assistance would be greatly appreciated to help resolve this matter.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder
Petroleum Engineer

NTM/bdm

cc: USGS

Shell Oil Company



P.O. Box 831
Houston, Texas 77001

July 25, 1980

Michael T. Minder, Petroleum Engineer
Division of Oil, Gas, and Mining
State of Utah
1588 West North Temple
Salt Lake City, UT 84116

RECEIVED
JUL 28 1980

DIVISION OF
OIL, GAS & MINING

Dear Mr. Minder:

PLUGGING REPORT
WELL NO. FEDERAL HARVEY 1-10
SECTION 10, T.32S., R.1E.
GARFIELD COUNTY, UTAH

A review of our files concerning the information requested on Federal Harvey 1-10 in your letter of March 21, 1980 has now been completed.

The data indicates that no further work was performed on said well between the time of the Sundry Notice dated September 22, 1976 and the Well Completion Report of March 23, 1978. A Sundry Notice also submitted March 23, 1978 denoted plans for final disposition of this well to the Forest Service for use as a water well (see attached copy of Sundry Notice). However, recent discussions with the Forest Service indicate that they no longer have any desire to appropriate the well.

Since the Federal Harvey 1-10 now appears to be of no further value, we will initiate procedures to complete surface abandonment of the well in a timely manner. If you should have any further questions concerning this matter, please contact P. K. Duncan (713/241-2024) at any time.

Yours truly,

A handwritten signature in cursive script that reads "G. L. Carlson".

G. L. Carlson
Division Engineering Manager
Rocky Mountain Division

PKD:JL

Attachment

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

SUBMIT DUPLICATE*
(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. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. U-20707
2. NAME OF OPERATOR Shell Oil Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR P.O. Box 831 Houston, TX 77001 ATTN: P.G. GELLING RM. #6459 WCK		7. UNIT AGREEMENT NAME SHELL-FEDERAL
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface		8. FARM OR LEASE NAME HARVEY
14. PERMIT NO.		9. WELL NO. 1-10
15. ELEVATIONS (Show whether DF, RT, OR, etc.) 9747-GR		10. FIELD AND POOL, OR WILDCAT WILDCAT-ZINC
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SW1/4 NW1/4 T32S R1E
		12. COUNTY OR PARISH GARFIELD
		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

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)

(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.)*

SEE ATTACHED

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE: 4/28/82
BY: [Signature]

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

SIGNED [Signature]
W. F. N. KELEDORF

TITLE DIVISION PRDD. ENGINEER

DATE 4-28-82

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE _____

PLUG AND ABANDONMENT WORKSHEET
SHELL HARVEY FEDERAL 1-10
SECTION 10, T32S, R1E
ZINC AREA WILDCAT
GARFIELD COUNTY, UTAH

Pertinent Data:

Elevation (KB): 9760' (est.)
Elevation (GL): 9747' ungraded ground (unsurveyed)
TD: 5140'
PBD: 1732' (77' cement plug, 1732/1809'+)
Casing: 13-3/8", 48#/ft, H-40 to 1066' depth
9-5/8", 36#/ft, K-55 to 1850' depth

Objective: Perform surface abandonment.

Procedure:

1. MIRU. Install and test BOPE as per field specs.
2. RIH with 2-7/8" tubing to 1732' and fill casing with clay base mud.
3. Spot 15 sacks of Class "H" cement slurry 5'+ below surface. (If more than one string of casing remains at the surface, all annuli shall be so cemented.)
4. Cut all casings at 5'+ below surface.
5. Lay down tubing and move rig off loc.
6. Weld 1/4" steel cover plate across top of 13-3/8" casing. Restore surface location. Set abandoned well marker. Marker should be minimum 4" in diameter and not less than 10' in length of which 4' shall be above ground level. The remainder being securely embedded in cement. The top of the pipe must be permanently sealed. Complete well identification shall be permanently set on the marker post.

Recommended _____ Approved _____

Date _____

BJH:SJP
11/19/81

ALTAMONT OPERATIONS
DAILY COMPLETIONS AND REMEDIALS REPORT
WELL HISTORY FOR 426
ISSUED 01/24/83

WELL	HARVEY FEDERAL 1-10
LABEL	FIRST AND LAST REPORT
AFE	520101
FOREMAN	K. J. DESHOTEL
RIG	WOW 29
OBJECTIVE	P AND A
CUM COST	35000
DATE	OCT 14, 1982 THUR OCT 15, 1982
ACTIVITY	OCT 14, 1982 MOVE RIG AND EQUIPT TO LOCATION AND STARTED P AND A OF WELL. RU DOWELL TO PLUG FOR ABANDONMENT. PUMP 11 BBLS. FRESH WATER. SET CMT. RETAINER AT 1100 FT. PUMPED 400 SACKS CLASS H CMT. BELOW RETAINER (1st 200 SACKS CLASS H - 2nd 200 SACKS CLASS H + 2% CACL2). STING OUT OF CR. DISPLACE TBG. W/8 BBLS. OF FRESH WATER. OCT. 15, 1982 SPOT 15 SACKS CLASS H CMT. ABOVE CR. PUMPED 20 SACKS CLASS H CMT. 40' TO SURFACE TO CAP WELL. FINISHED P AND A OF WELL AND RESTORING SURFACE. SET P AND A MARKER AND COVERED CELLAR OVER LOCATION. INSPECTED BY FOREST SERVICE. TOTAL COST 35000.

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

5. LEASE DESIGNATION AND SERIAL NO. U-20707
7. UNIT AGREEMENT NAME Shell - Federal
8. FARM OR LEASE NAME Harvey
9. WELL NO. 1-10
10. FIELD AND POOL, OR WILDCAT Wildcat - Zinc Area
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 10 T32S R1E SW/4 NW/4
12. COUNTY OR PARISH Garfield 18. STATE Utah
14. PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, OR, etc.) GR 9747'

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 [] Plugged and abandoned
2. NAME OF OPERATOR Shell Oil Company ATTN: B. T. Ellison 6486 WCK.
3. ADDRESS OF OPERATOR P. O. Box 831 Houston, Tx. 77001
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 633' FWL & 1476' FNL Sec. 10

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data
NOTICE OF INTENTION TO: TEST WATER SHUT-OFF [] FRACTURE TREAT [] SHOOT OR ACIDIZE [] REPAIR WELL [] (Other) []
PULL OR ALTER CASING [] MULTIPLE COMPLETE [] ABANDON* [] CHANGE PLANS []
SUBSEQUENT REPORT OF: WATER SHUT-OFF [] FRACTURE TREATMENT [] SHOOTING OR ACIDIZING [] (Other) []
REPAIRING WELL [] ALTERING CASING [] ABANDONMENT* [X]

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.)*

COMPLETED OPERATIONS (OCT. 14-15, 1982)

Pumped 11 bbls. fresh water. Set cmt. retainer at 1100'. Pumped 400 sacks class H cmt. below retainer (1st 200 sacks class H - 200 sacks class H + 2% CaCl2). Sting out of CR. Displace tbq. w/8 bbls. of fresh water. Spot 15 sacks class H cmt. above CR. Pumped 20 sacks class H cmt. 40' to surface to cap well. Finished P and A of well and restoring surface. Set P and A marker and covered cellar over location.

ACCEPTED APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING DATE: BY:

18. I hereby certify that the foregoing is true and correct SIGNED: B. T. Ellison TITLE: Div. Prod. Engr. DATE: February 11, 1983

(This space for Federal or State office use)

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

2
5

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

5. LEASE DESIGNATION AND SERIAL NO.

U-20707

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other P AND A

7. UNIT AGREEMENT NAME

Shell-Federal

8. FARM OR LEASE NAME

Harvey

9. WELL NO.

1-10

10. FIELD AND POOL, OR WILDCAT

Wildcat - Zinc Area

11. SEC., T., R., M., OR BLOCK AND SURVEY

OR AREA
Sec. 10 T32S R1E
SW/4 NW/4

12. COUNTY OR PARISH

Garfield

13. STATE

Utah

2. NAME OF OPERATOR
Shell Oil Company ATTN: B. T. Ellison 6486 WCK.

3. ADDRESS OF OPERATOR
P. O. Box 831 Houston, Tx. 77001

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 633' FWL & 1476' FNL Sec. 10

At top prod. interval reported below

At total depth

43-017-30069

14. PERMIT NO. DATE ISSUED

15. DATE SPUNDED 9/19/75 16. DATE T.D. REACHED 12/21/75 17. DATE COMPL. (XXXXXX) PA'd (10-15-82) 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* GR 9747' 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 5140' 21. PLUG, BACK T.D., MD & TVD 1732' 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY → Total 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 No logs run 27. WAS WELL CORRED No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48#	1066	17-1/2	700 SX	
9 5/8"	36#	1860	12-1/4	400 SX	

29. LINER RECORD					30. TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
DEPTH	INTERVAL (MD)	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

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

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

35. LIST OF ATTACHMENTS

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

SIGNED Bart T. Ellison TITLE Div. Prod. Engr. DATE February 11, 1983

*(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.)

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS	
				NAME	MEAS. DEPTH
				TOP	
				MEAS. DEPTH	TRUE VERT. DEPTH
			Samples only	Navajo Sand	1016+ <u> </u>