



**AMERICAN PETROFINA COMPANY OF TEXAS**

POST OFFICE BOX 2159 • DALLAS 21, TEXAS

May 23, 1961

Utah Oil & Gas Conservation Commission  
140 State Capitol  
Salt Lake City 14, Utah

Re: Change of Location, Phillips  
Petroleum Company Escalante  
Well #1, 29-32S-3E, Garfield  
County, Utah - Waiver of  
Notice and Hearing

Gentlemen:

Reference is made to the location of Phillips Petroleum Company's proposed Escalante No. 1 Well originally staked 990 feet from the South line and 1650 feet from the West line of Section 29, Township 32 South, Range 3 East, Garfield County, Utah.

Phillips Petroleum Company has informed us that they desire to move the location to 683 feet from the South line and 2384 feet from the West line of said Section 29, and has requested that we prepare and forward to you a waiver as we are the adjoining leaseholder.

This letter is therefore written to consent to said change of location and to waive any further notice or hearing insofar as we are entitled to same or have the right to request same.

Should you need a further waiver from us in this connection or should you need the waiver in a different form, we will comply with your requirements immediately on hearing from you.

Yours truly,

A handwritten signature in cursive script that reads "Frank M. Carr".

Frank M. Carr, Mgr.  
Land Department

FMC:as

cc: Phillips Petroleum Company  
Att'n: Mr. L. E. Fitzjarrald

# PHILLIPS PETROLEUM COMPANY

P. O. Box 1150  
Cortez, Colorado

May 24, 1961

Utah Oil and Gas Conservation Commission  
Room 310 Newhouse Building  
Salt Lake City, Utah

Attention: Mr. Cleon B. Feight

Dear Sir:

The attached U.S.G.S. Form 9-331a with accompanying plat is submitted for your approval to drill Phillips Petroleum Company Escalante No. 1 at a location 682 feet from South, 2384 feet from West lines of Section 29, T32S, R3E, Garfield County, Utah.

Proposed location is 256 feet from East line of Phillips' lease whereas State of Utah Oil and Gas Conservation Commission Rule C-3(b) provides a minimum of 500 feet unless "Specifically permitted by order of the Commission after notice and hearing, or unless an exception is granted by the Commission pursuant to Rule C-3(c)".

General area surrounding location is severely eroded leaving inaccessible sandstone cliffs and ledges and numerous deep ravines in alluvium. A location near the center of the SE/4, SW/4 Section 29 is on top of sandstone point with East, West, and South near vertical 40' cliffs and could not feasibly be prepared as a drilling site. The location staked is as far West from lease line toward sandstone cliff as practical and economical to prepare for drilling site.

The proposed well is to test for Mississippian production as total depth objective; any oil or gas shows in upper formations to be investigated during drilling operations. There is no existing oil or gas production in the area.

Necessary permits for surface construction are being obtained from United States Department of Agriculture, Forest Service offices at Escalante and Cedar City, Utah.

Utah Oil and Gas Conservation Commission  
May 24, 1961  
Page No. 2

Waiver of objection to the proposed location is being submitted to your office direct by American Petrofina Company, East offset operator. At such time as waiver from offset operator is received you are respectfully requested to grant exception to spacing requirements of Utah Oil and Gas Conservation Commission Rule C-3(b) without notice and hearing, pursuant to Rule C-3(c).

In so far as this office can determine the proposed location meets spacing requirements of United States Department of Interior - Geological Survey - Oil and Gas Regulation 221.20, Well Location Restrictions. Approval of the U.S.G.S. is being requested in the normal manner with copy of this letter being furnished to advise that agency of request for exception to Utah Oil and Gas Conservation Commission Rule C-3(b).

Very truly yours,

PHILLIPS PETROLEUM COMPANY



C. M. Boles  
District Superintendent

CMB:HFS  
cc: USGS (2)

P. O. Drawer 1150  
Cortez, Colorado

May 24, 1961

In re: Special Use Application, Phillips Petroleum Company  
Escalante Well No. 1

Ranger John Strang (2)  
District Forest Ranger  
Escalante, Utah

Dear Sir:

With regard to Special Use Application of May 22, 1961, and in accord with previous verbal discussion with you, I have this date contacted Mr. Francis Mayo of the Utah State Engineer's Office, Salt Lake City, Utah, by telephone to obtain permission for temporary use of water from Sand Creek.

Mr. Mayo granted verbal approval of the request with the understanding that such use is for drilling purposes, is for a temporary period, and will in no way interfere with domestic or irrigation users or the Forest Service.

As stated in our letter of May 22, 1961, my investigation indicates that waters of Sand Creek are not being used for domestic or irrigation purposes at present, and proposed temporary use of the water is not believed detrimental to the interests of any individual, the Forest Service, or the State of Utah.

The above is for your information.

Very truly yours,  
PHILLIPS PETROLEUM COMPANY

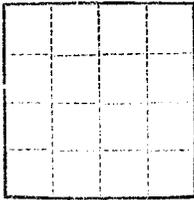
  
C. M. Boles  
District Superintendent

CMB:bh

cc: Messrs. Francis Mayo  
Earl Griffin, Bartlesville

State

Form 9-381a  
(Feb. 1951)



(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office Salt Lake  
Lease No. 071299  
Unit Escalante

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....		SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....		SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....		SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO ABANDON WELL.....			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

May 24, 1961, 19

Escalante  
Well No. 1 is located 682 ft. from 101 [S] line and 2384 ft. from XXXX [W] line of sec. 29  
SE 1/4, SW 1/4 Sec. 29 32S 3E S1EM  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
Wildest Garfield Utah  
(Field) (County or Subdivision) (State or Territory)

The elevation of the ungraded ground ~~surface~~ above sea level is 8369 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Drill 24" hole to approx. 90', set 20" conductor pipe and cement to surface.  
 Drill 17-1/2" hole to approx. 1100', set 13-3/8" casing and cement to surface.  
 Drill 12-1/4" hole to approx. 4300', set 9-5/8" casing and cement to protect any possible producing zones. Drill 8-3/4" hole to approx. 6200' to test Mississippian - If productive, set 5-1/2" liner and complete.

Waiver of offset operator for spacing less than 500' from lease line being obtained - per attached letter.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Phillips Petroleum Company

Address P. O. Box 1150

Cortez, Colorado

By C. M. Boles

Title District Superintendent

Area Oil & Gas  
29-32S-3E

Allen

Memorandum

To: District Oil and Gas Engineer, Mr. Edward Gynn  
From: Mining, Supervisor, Mr. Jackson W. Moffitt  
Subject: Application for Permit to Drill (form 9-331c) Federal oil and gas lease No. U-38347 Well No. 2

1. The location appears potentially valuable for:

- strip mining\*
- underground mining\*\*
- has no known potential.

2. The proposed area is

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

\*If location has strip mining potential:

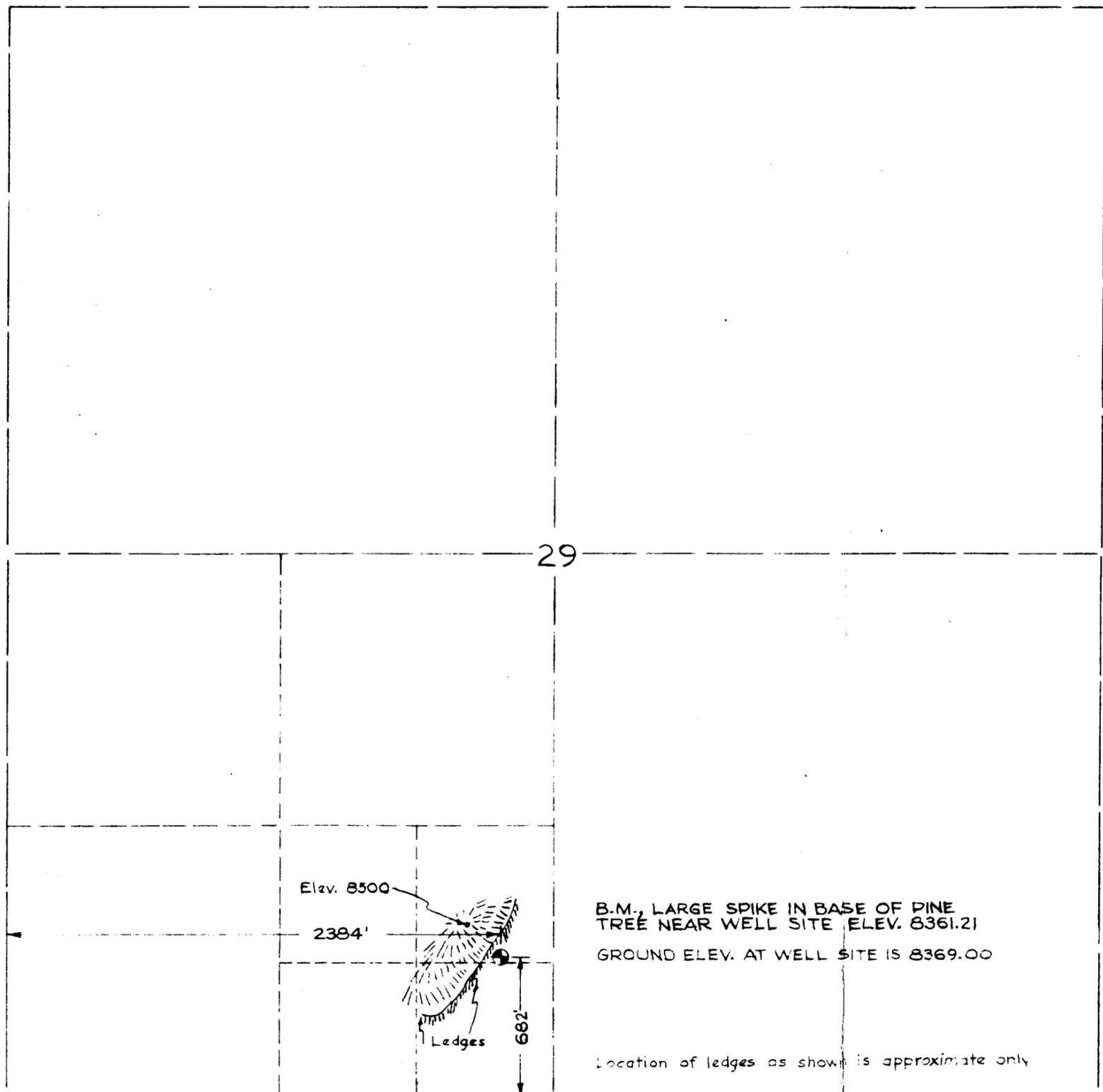
Surface casing should be set to at least 50 feet below the lowest strip minable zone at \_\_\_\_\_ and cemented to surface. Upon abandonment, a 300-foot cement plug should be set immediately below the base of the minable zone.

\*\*If location has underground mining potential:

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

Signed Allen J. Vance

AUG 12 REC'D



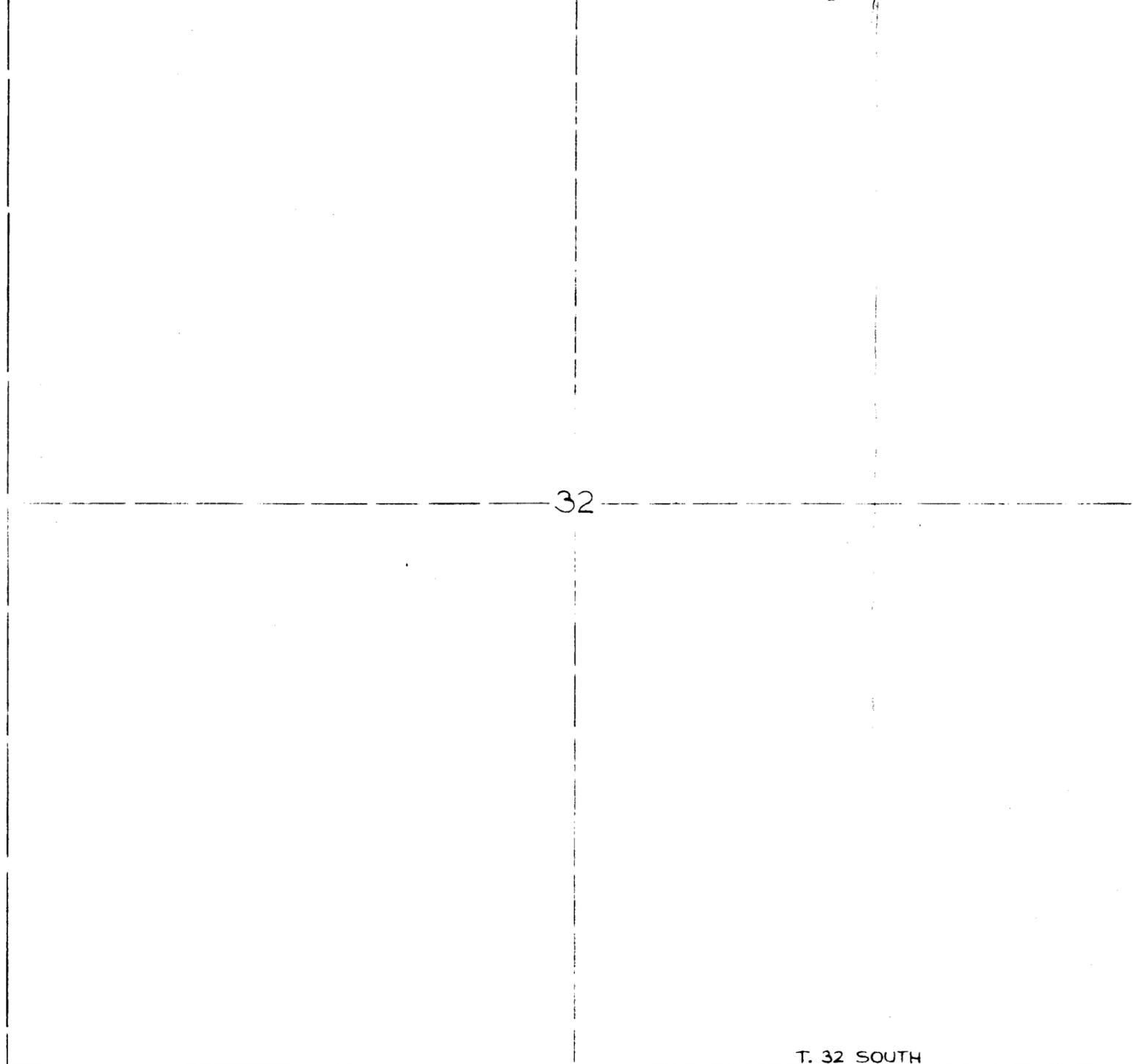
**NOTES:**

THE PROPOSED LOCATION OF THE OIL WELL, WAS DETERMINED BY A COMBINATION OF TRAVERSING AND TRIANGULATION FROM THE NORTHWEST CORNER OF SECTION 6, TOWNSHIP 33 SOUTH, RANGE 4 EAST. TOWNSHIP 32 SOUTH, RANGE 3 EAST IS UNSURVEYED.

BEARINGS WERE DETERMINED FROM AN OBSERVATION OF POLARIS.

THE PROPOSED LOCATION WAS MARKED ON THE GROUND WITH A 1" X 2" X 6' STAKE. THE WELL LOCATION WILL BE EAST 2384' AND NORTH 682' FROM THE SOUTHWEST CORNER OF SECTION 29, TOWNSHIP 32 SOUTH, RANGE 3 EAST IF THE TOWNSHIP IS SURVEYED AS A REGULAR TOWNSHIP WITH FULL SIZED SECTIONS AND TRUE BEARINGS FROM THE NORTHWEST CORNER OF SECTION 6, TOWNSHIP 33 SOUTH, RANGE 4 EAST, SALT LAKE BASE AND MERIDIAN.

THE ELEVATIONS SHOWN ON THE PLAT WERE ESTABLISHED FROM A POINT ON A CLOSED LEVEL CIRCUIT FROM THE U.S.C. & G.S. BENCH MARK AT THE FOREST SERVICE RANGER STATION IN ESCALANTE, UTAH. B.M. ELEV. = 5800.806 (STAMPED 5801.00).



RANGE 3 EAST, S.L.B.&M.

CERTIFICATE

I HEREBY CERTIFY THAT THE ABOVE IS A TRUE AND CORRECT PLAT OF A SURVEY MADE UNDER MY DIRECTION IN MAY, 1961, FOR PHILLIPS PETROLEUM COMPANY, TO DETERMINE THE PROPOSED LOCATION OF AN OIL WELL TO BE KNOWN AS ESCALANTE NO. 1: SAID LOCATION BEING IN GARFIELD COUNTY, UTAH.

DATED: MAY 22, 1961

*Richard C Hansen*  
PROFESSIONAL ENGINEER AND LAND SURVEYOR  
UTAH LICENSE NO. 1138  
RICHFIELD, UTAH

SCALE: 1"= 600'

May 29, 1961

Phillips Petroleum Company  
P. O. Box 1150  
Cortez, Colorado

Attn: C. M. Boles, District Superintendent

Gentlemen:

This is to acknowledge receipt of your letter requesting an unorthodox location for Well No. Escalante #1, which is to be located 682 feet from the south line and 2384 feet from the west line of Section 29, Township 32 South, Range 3 East, S1E4, Garfield County, Utah.

Please be advised that insofar as this office is concerned approval to drill said well on said unorthodox location is hereby granted in accordance with Rule C-3 (e), General Rules and Regulations and Rules of Practice and Procedure, Oil and Gas Conservation Commission, State of Utah.

This approval terminated within 90 days if the above mentioned well has not been spudded in within said period.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FREIGHT,  
EXECUTIVE SECRETARY

CBF:kpB

cc: Don Russell  
U. S. Geological Survey

H. L. Coonts - OGCC, Moab

PHILLIPS PETROLEUM COMPANY

P. O. Drawer 1150  
Cortez, Colorado

June 1, 1961

Utah Oil & Gas Conservation Commission  
310 Newhouse Building  
Salt Lake City 11, Utah

Attention: Mr. Cleon B. Feight

Dear Sir:

Confirming Mr. H. G. Cook's telephone conversation with you today, please change the lease and well number on USGS Form 9-331a covering intention to drill Escalante No. 1 located 682 feet from South, 2384 feet from West lines of Section 29, T32S, R3E, Garfield County, Utah, filed May 24, 1961, to Escalante Unit Number 2. This change is the result of USGS request to make this well the No. 2 on the Unit.

I wish to take this opportunity of thanking you for your cooperation in this matter.

Very truly yours,  
PHILLIPS PETROLEUM COMPANY

*C. M. Boles*  
C. M. Boles  
District Superintendent

HGC:bh

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

LAND OFFICE Salt Lake  
LEASE NUMBER 071299  
UNIT Escalante

**LESSEE'S MONTHLY REPORT OF OPERATIONS**

State Utah County Garfield Field Wildcat

The following is a correct report of operations and production (including drilling and producing wells) for the month of June, 1961,

Agent's address P. O. Drawer 1150 Company PHILLIPS PETROLEUM COMPANY  
Cortez, Colorado Signed [Signature]  
Phone Logan 5-3426 Agent's title C. M. Boles District Superintendent

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
<u>ESCALANTE UNIT</u>										
SE SW 29	32S	3E	2							Drilling 161

NOTE.—There were \_\_\_\_\_ runs or sales of oil; \_\_\_\_\_ M cu. ft. of gas sold;

\_\_\_\_\_ runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

LAND OFFICE Salt Lake  
LEASE NUMBER 071299  
UNIT Escalante

**LESSEE'S MONTHLY REPORT OF OPERATIONS**

State Utah County Garfield Field Wildcat

The following is a correct report of operations and production (including drilling and producing wells) for the month of July, 1961,

Agent's address P. O. Drawer 1150 Company PHILLIPS PETROLEUM COMPANY  
Cortez, Colorado Signed C. M. Boles

Phone Logan 5-3426 Agent's title District Superintendent

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
<b>ESCALANTE UNIT</b>										
SE SW 29	32S	3E	2							Drilling 2748.

NOTE.—There were \_\_\_\_\_ runs or sales of oil; \_\_\_\_\_ M cu. ft. of gas sold; \_\_\_\_\_ runs or sales of gasoline during the month. (Write "no" where applicable.)

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Copy 1-10

Budget Bureau No. 42-R356.5.  
Approval expires 12-31-60.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

LAND OFFICE Salt Lake  
LEASE NUMBER 071299  
UNIT Escalante

**LESSEE'S MONTHLY REPORT OF OPERATIONS**

State Utah County Garfield Field Wildcat

The following is a correct report of operations and production (including drilling and producing wells) for the month of August, 1961

Agent's address P O Drawer 1150 Company PHILLIPS PETROLEUM COMPANY  
Cortez, Colorado Signed C. M. Boles

Phone 565-3426 Agent's title District Superintendent

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
<b>ESCALANTE UNIT</b>										
SE SW 29	32S	3E	2							Drilling 5005

NOTE.—There were \_\_\_\_\_ runs or sales of oil; \_\_\_\_\_ M cu. ft. of gas sold;

\_\_\_\_\_ runs or sales of gasoline during the month. (Write "no" where applicable.)

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

LAND OFFICE Salt Lake  
LEASE NUMBER 071299  
UNIT Escalante

**LESSEE'S MONTHLY REPORT OF OPERATIONS**

State Utah County Garfield Field Wildcat

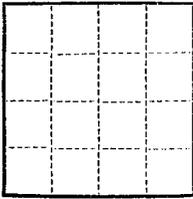
The following is a correct report of operations and production (including drilling and producing wells) for the month of September 19 61,

Agent's address P O Drawer 1150 Company PHILLIPS PETROLEUM COMPANY  
Cortez, Colorado Signed C. M. Boles  
Phone 565-3426 Agent's title Dist. Supt.

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL No.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
<u>ESCALANTE UNIT</u>										
<u>SE SW 29</u>	<u>32S</u>	<u>3E</u>	<u>2</u>							<u>Drilling 5213</u>

NOTE.—There were \_\_\_\_\_ runs or sales of oil; \_\_\_\_\_ M cu. ft. of gas sold; \_\_\_\_\_ runs or sales of gasoline during the month. (Write "no" where applicable.)

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(SUBMIT IN TRIPLICATE)  
**UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**GEOLOGICAL SURVEY**

Land Office Salt Lake  
 Lease No. 071299  
 Unit Escalante

**SUNDRY NOTICES AND REPORTS ON WELLS**

NOTICE OF INTENTION TO DRILL.....		SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....		SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....		SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	X	SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO ABANDON WELL.....			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

**Escalante Unit** Cortez, Colorado October 30, 1961  
 Well No. 2 is located 682 ft. from N line and 2384 ft. from W line of sec. 29  
3E/4, 3W/4 32S 3E SLM  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
Wilcoat Garfield Utah  
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 6371 ft.

**DETAILS OF WORK**

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

**Plug dry hole. Hole to be filled with heavy mud-laden fluid. Cement plugs to be spotted at the following approximate depths:**

**5960-5790, 4900-4600, 3180-3030, 2500-2350, and 60' to surface.**

**13-3/8" casing set at 1076' cemented from 1076' to surface, and 9-5/8" casing set at 2607' cemented from 2607' to 1105' will be left in hole.**

**Plugging operations will start immediately per verbal approval October 30, 1961, Harstead to Boles and Schmidt to Boles.**

**Well logs will accompany plugging report.**

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company PHILLIPS PETROLEUM COMPANY  
 Address P. O. Drawer 1150  
Cortez, Colorado  
 By C. M. Boles  
 Title District Superintendent

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

LAND OFFICE Salt Lake  
LEASE NUMBER 071299  
UNIT Escalante

**LESSEE'S MONTHLY REPORT OF OPERATIONS**

State Utah County Garfield Field Wildcat

The following is a correct report of operations and production (including drilling and producing wells) for the month of October, 1961,

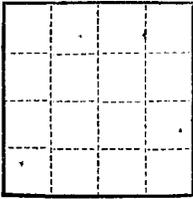
Agent's address P O Drawer 1150 Company PHILLIPS PETROLEUM COMPANY  
Cortez, Colorado Signed C. M. Boles

Phone 565-3426 Agent's title District Superintendent

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL No.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
<b>ESCALANTE UNIT</b>										
SE SW 29	32S	3E	2							TD6062 - Plugging well

NOTE.—There were \_\_\_\_\_ runs or sales of oil; \_\_\_\_\_ M cu. ft. of gas sold; \_\_\_\_\_ runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.



(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office Salt Lake  
Lease No. 071299  
Unit Escalante

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	<input checked="" type="checkbox"/>
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....	<input checked="" type="checkbox"/>
NOTICE OF INTENTION TO ABANDON WELL.....		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Cortez, Colorado      November 8, 1961

Escalante Unit

Well No. 2 is located 682 ft. from IN line and 2384 ft. from W line of sec. 29

SE/4, SW/4 29      32S      3E      SLEM  
(¼ Sec. and Sec. No.)      (Twp.)      (Range)      (Meridian)

Wildcat      Garfield      Utah  
(Field)      (County or Subdivision)      (State or Territory)

The elevation of the derrick floor above sea level is 8371 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Hand dug 40" conductor hole to 21'. Set and cemented 16-1/2' of 36" corrugated conductor pipe at 21' w/35 sx. cement. Completed job at 4:00 P.M. 6/27/61.

Spudded 8:00 A.M. 6-30-61. Drilled 9-7/8" hole to 161'. Reamed 26" hole to 118'. Set and cemented 3 jts. 20" 53.6# SWSJ casing at 117' with 250 sx. Portland Cement, 2% Calcium Chloride, 1/4#/sk. Floccs. Cement circulated. Job complete 2:25 P.M. 7-1-61.

Drilled 12-1/4" hole to 1100'. Reamed 17-1/4" hole to 1080'. Set and cemented 35 jts. 13-3/8" O.D. 48# H-40 8rd thd ST&C Rg2 SS casing at 1076' with 1000 cu. ft. Diacel "D" cement with 2% Calcium Chloride, 1/4# per sack Floccs, 2#/sk. Tuff Plug followed with 150 sks. regular cement with 2% Calcium Chloride (410 sks Cement, 7700# Diacel "D", 770# Calcium Chloride, 200# Floccs, 770# Tuff Plug, followed with 150 sks. regular cement with 280# Calcium Chloride). (Continued on reverse side.)

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company PHILLIPS PETROLEUM COMPANY

Address BOX 1150

CORTEZ, COLORADO

By C. M. Boles  
C. M. Boles  
Title District Superintendent

(Continued)

Pumped plug to 1046' at 5:40 PM 7/7/61. Circulated estimated 550 cu. ft. cement. W.O.C. 24 hours. Tested with 650# for 30 minutes and held O.K.

Drilled 12-1/4" hole to 1352'. Cored from 1352-1377 - no recovery. Cored 1377' to 1402', recovered 4'. Reamed cored hole and drilled 12-1/4" hole to 1430'. Cored from 1430-55, recovered 3'. Continuous flow of non-flammable gas beginning at approximately 1360' while coring.

At 1455' measured gas flow with orifice well tester - 771 MCFPD (14.65# pressure base, assumed 60°, 60 gravity. 2-1/2 hrs shut in pressure 44#. Reamed cored hole and drilled 12-1/4" hole to 1650'. Non-flammable gas flow measured 975 MCFPD, 30 minute SIP 42-1/2#. Drilled 12-1/4" hole to 2274' - non-flammable gas volume increased to 13.1 MMCFPD. Cored from 2274-87, recovered 12'. Reamed cored hole. Resumed drilling 12-1/4" hole at 2287'. No increase in gas volume. Gas has sulphur odor. Drilled 12-1/4" hole to 2609' - checked gas flow after hole had been blowing 5 hrs (28# on pitot tube); gas volume 41.3 MMCFPD uncorrected, 24.8 MMCFPD corrected to 1.5 gravity. Increase in corrected gas volume from 13.1 MMCFPD observed while drilling from 2287' to 2550'. Unable to determine if increase due to additional section cut or to gradual increase from Section above 2287'. Pulled bit up into 13-3/8" casing. Closed well in. SIP 91 psi; partial gas analysis reports: 1606' depth, 89.4% CO<sub>2</sub>, 0.082% Helium; 2260' depth - 0.3% helium. Hole pressure stabilized at 100 psi. Ran Schlumberger Induction ES log to top of cavings at 2557'. Ran Schlumberger temperature log while blowing well through 2" choke line at rate of 2.8 MMCFPD corrected for 1.5 gas gravity. Gas increase zones not definite on temperature log, distinct break in curve at 1350' believed to be approximate point of entry of lower zone gas into Shinarump zone. (SIP of Shinarump 44#, SIP with both Shinarump and Tempowap zones open 100#). Set and cemented 79 jts. 9-5/8" OD casing as follows: 14 jts 40# J-55 8rd LT&C Rg 3 A Condition; 53 jts 36# J-55 8rd LT&C Rg 2 A Condition; 11 jts 32.3# H-40 8rd ST&C Rg 2 A Condition; 1 jt 40# J-55 8rd LT&C (top) ST&C Rg 3 A Condition, at 2607.40' with 1728 cu. ft. 20% Diacel "D" with 2#/sk. Tuff Plug, 1/2#/sk. Flocele, 2% Calcium Chloride, followed with 200 sks. regular neat cement (720 sks common cement mixed with 20% Diacel "D"). Used 60 barrels gelled mud ahead of cement. Started pumping with well closed in. Annulus pressure decreased 115# to 69#, then increased to 80# at which time started bleeding gas through choke line, pressure bled to 0# at end of job. Plug pumped to 2564' with 750# maximum pressure at 2:00 PM 7/26/61. Ran Schlumberger Gamma Ray Neutron and Temperature logs. TSTC 1105'. W.O.C. Tested casing with 750# for 30 minutes and held O.K. Drilled 8-3/4" hole to 2772'. Had estimated 5 MMCFPD at 2700'. 15 minute SIP 115#; at 2707' measured flow with pitot tube at 7.25 MMCF uncorrected 2 hr SIP 117#. Gas is non-flammable. Pulled bit, made 3 runs with temperature bomb and found gas entry around 9-5/8" casing shoe. Gas volume increased to 26.3 MMCFPD uncorrected while running temperature survey. Instrument stopped on bridge at 2637' on third run. Loaded hole through 4-1/2" drill pipe with 100 barrels of gelled mud, blew pressure off casing and well dead. Ran Halliburton D.M. Cement Retainer on 4-1/2" drill pipe. Set retainer at 2592'. Filled annulus with water and pressured to 700#. Mixed 200 sks. regular cement. Squeezed 145 sks around 9-5/8" casing shoe at 3000#, maximum pressure; 3000# holding pressure. Reversed out 55 sks. Job complete at 12:00 noon 8/3/61. W.O.C. 12 hours. Unloaded water from hole. Drilled Halliburton DM cement retainer at 2592'. No cement in casing below retainer. Ran Halliburton RTTS tool on 4-1/2" Drill Pipe. Set tool at 2478', pressured casing to 700#. Mixed 200 sks. regular cement, 2% Calcium Chloride in first 100 sks. Squeezed 187 sks. around 9-5/8" casing shoe, left 13 sks in bottom of 9-5/8" casing. Maximum pressure 2400#, holding pressure 2400#. Job complete at 10 PM 8/4/61.

(Continued on page 2)

Sundry Notices and Reports on Wells  
Subsequent Report of Water Shut Off  
Supplementary Well History  
November 8, 1961

Land Office - Salt Lake  
Lease No. 071299  
Unit - Escalante

(continued)

Drilled 12-1/4" hole 2772' to 2800' with conventional bit. Drilled 2800' to 3440' with Mission Hammer Drill and Reed Percussion Bit (8-3/4" hole). Well started making non-flammable gas - increased while drilling 3182' to 3355' to 2.3 MMCFPD - uncorrected temperature and gravity at 3355' measured flow with pitot tube 1 hr. and 15 minutes. Shut In Pressure 103#.

At 3389' had increased flow to estimated 10 MMCFPD. Stopped drilling at 12:00 noon 8/8/61 to run Temperature Survey to determine if gas flow from Coconino or if squeeze job around 9-5/8" casing shoe leaking Kaibab gas. Ran Schlumberger Temperature Survey. Gas entering hole in Coconino at 3370' to 3420'. Pitot tube measurement of gas flow 8 MMCFPD.

Drilled 8-3/4" hole with conventional bit from 3440'. Had non-flammable increase at 3554' to 17.9 MMCFPD at 3723'; had increase to 23.6 MMCFPD - uncorrected for gravity and temperature. SIP 138#. Had estimated 20 barrels salt water - believe water entering hole from formation with drilling breaks between 4842-87'. Had estimated 900' water in hole at 4918'. Estimate water production 9 to 10 BPH while drilling. Had drilling break at 4987-95'. Water production increased to estimated 20 BPH. Made trip at 5005'. Unable to unload water after trip. Air going into formation. Pulled bit. Started rigging up for mud circulation - established returns. Drilled through bridge at 4840' and lost returns. Gas flow returned after losing returns. Checked fluid level at 4430'. Pulled bit. Ran open ended drill pipe to 4725' (TD 5005). Spotted Plug No. 1 100 sks cement with 4#/sk. Tuff Plug, 2% Calcium Chloride. Job complete at 6:00 PM 9/1/61. W.O.C. 8 hours. Ran bit, found top cement plug at 4821'. Mixed and pumped 1200 bbls mud with lost circulation material. Gas flow killed after pumping 900 bbls mud. Established full returns with 1200 bbls. Started in hole to drill cement plug. Found bridge at 4794'. Drilled small bridge at 4794' - lost 20 barrels mud. Drilled cement plug at 4821' to 4860' and bridge at 4860' to 4880'. Lost returns at 4880'. Pumped in 200 barrels mud with lost circulation material and established partial returns, losing 50 bbls/hour. Pulled bit. Ran drill pipe open ended to 4875'. Spotted Plug No. 2 - 50 sks. regular cement with 5# Tuff Plug per sack, 2% Calcium Chloride. Job complete at 2:00 P.M. 9/3/61. Gas did not return prior to spotting plug. W.O.C. 8 hours. Filled hole and established full returns with 75 barrels mud. Drilled cement plug 4871' to 4891' and lost returns. Pumped in 200 barrels mud and lost circulation material and did not establish returns. Pulled bit. Ran drill pipe open ended. Found small bridge at 4874'. Washed out bridge and lowered drill pipe to 4891' in open hole. Pulled up and mixed additional mud in pits. Lowered open ended drill pipe to 4875'. Spotted Plug #3 - 50 sks. cement with 4# Tuff Plug per sack, 2% Calcium Chloride. WOC 8 hours. Filled hole with 200 barrels mud. Ran bit, found top of plug at 4871', drilled cement plug 4871' to 4899' with no loss of returns. Complete loss of returns at 4899'.

(Continued on Page 3)

Sundry Notices and Reports on Wells  
Subsequent Report of Water Shut Off  
Supplementary Well History  
November 8, 1961

Land Office - Salt Lake  
Lease No. 971299-071299  
Unit - Escalante

Well: Escalante Unit #2

(Continued from page 2)

Ran drill pipe open ended. Found bridge at 4895'. Filled hole with 50 barrels mud. Washed out bridge to 4905' and lost returns. Pulled open ended drill pipe up to 4875'. Spotted #4 Plug - 50 sks cement with 4# Tuff Plug/sk., 2% Calcium Chloride. Job complete at 6:00 A.M. 9-5-61. WOC 4 hours. Filled hole with 100 barrels mud. Ran bit. Washed out heavy mud and lost circulation material at 4835' to 4866'. Drilled hard cement plug 4866' to 4915'. Lost circulation and stuck pipe at 4915'. Worked pipe and pumped small amount of mud intermittently through pipe 4 hours and worked pipe loose. Gas flow from upper formation resumed while pulling out of hole. Ran open ended drill pipe. Washed out small bridges at 4870' and 4885'. Ran pipe to 4946'. Hole clear to 4946'. Pulled pipe up to 4935'. Spotted Plug No. 5 - 100 cu. ft. of 50-50 regular cement and Cal Seal 50 with 40% Diacel "D", 5% Diacel "A", .5% Diacel LWL. Job complete at 4:15 A.M. 9/6/61. Pulled pipe up into 9-5/8" casing. WOC 6 hours. Ran open ended drill pipe. Took weight at 4951'. Pulled up to 4935'. Spotted Plug #6 identical to Plug #5. Job complete 11:00 A.M. 9-6-61. WOC 3 hours. Ran open ended drill pipe. Washed without returns 4950-56'. Took 20,000# weight at 4956'. Pulled up to 4935'. Spotted Plug #7 identical to Plugs No. 5 and No. 6. Job complete at 2:45 P.M. 9-6-61. W.O.C. 4 hours.

Ran open ended drill pipe. Took weight at 4954'. Pulled up to 4935' and spotted Plug #8 - 50 sks regular cement with 23% Cal Seal 120, 4# Tuff Plug per sack. Job complete at 7:00 P.M. 9-6-61. W.O.C. 5 hrs. Mud column still below gas zone. Ran open ended drill pipe. Found top of plug at 4874'. Pulled drill pipe up into 9-5/8" casing. Mixed and pumped 680 barrels mud with lost circulation material and established returns. Gas flow dead after pumping 300 barrels. Pulled drill pipe, ran bit to bottom of 9-5/8" casing. Drilled cement plug to 4884' losing estimated 30 barrels mud per hr. Drilled cement plug 4884' to 4934'. Lost 108 barrels mud while drilling plug, complete loss of returns at 4934'. Gas flow from upper formation returned. Pumped in 200 barrels mud with L.C.M. Established returns. Had continuous mud loss, but not severe. Established returns with 90 barrels. Drilled cement 4934-55' and ran out of mud. Mixed and pumped 500 barrels mud and LCM and did not establish returns. Gas flow returned. Ran drill pipe open ended to 4950'. Spotted plug #9 - 50 sks regular cement with 20% Cal Seal 120, 2% Calcium Chloride. Job complete at 2:30 A.M. 9-10-61. Pulled drill pipe up in 9-5/8" casing. WOC 6 hours. Mixed and pumped 680 bbls mud and LCM and established returns. Drilled cement plug 4871-80'. Lost 90 barrels mud. Drilled 4880' to 4912' with full returns. Drilled to 4931 and lost returns. Mixed and pumped 400 barrels mud and LCM and unable to regain circulation. Ran open ended drill pipe to 4931'. Spotted Plug #10 - 100 cu.ft. of 1 to 1 cemen-gilsonite with 3% Calcium Chloride. Job complete at 4:30 AM 9-13-61. Ran open ended drill pipe to 4920'. Spotted Plug No. 11 - 100 cu.ft. 1 to 1 Cement-Gilsonite with 3% Calcium Chloride. Job complete at 6:00 A.M. 9-14-61. WOC 8 hrs. Filled hole with 90 barrels. Ran bit. Found top of plug at 4860'. Drilled plug 4860'-~~4882~~ 4895' with full returns. Drilled cement plug 4895-4951' and lost returns. Drilled to 4953' without returns. Gas flow returned. Ran open ended drill pipe to 4940. Spotted Plug No. 12 - 100 cu.ft. 1 to 1 Cement-Gilsonite with 3% CC. Job complete at 1:30 PM 9-15-61. WOC 4 hours. No cement fill up.

(Continued on page 4)

Sundry Notices and Reports on Wells  
Subsequent Report of Water Shut Off  
Supplementary Well History  
November 8, 1961

Land Office - Salt Lake  
Lease No. 971299 *071299*  
Unit - Escalante

Well: Escalante Unit #2

(Cont'd from pg 3)

Spotted Plug #13, 108 cu. ft. of 1 to 1 Cement and Cal Seal with 40% Diacel "D" with .5% LWL, 5% Diacel "A". Job complete at 6:00 P.M. 9-15-61. WOC 6 hours. Ran drill pipe to 4953', pulled to 4940' and spotted Plug #14 - 100 cu. ft. 1 to 1 Cement-Gilsonite with 3% CC. Job complete 1:00 A.M. 9-16-61. WOC 6 hours - no cement fill up. Mixed and pumped 80 barrels heavy LCM slug. Waited 1 hour. Mixed and pumped 40 barrels heavy LCM slug with bottom drill pipe at 4940'. Spotted Plug #15, 126 cu. ft. Cement with 2% Gel, 1-1/2% Calcium Chloride, 13.5#/gallon slurry. Job complete 2:00 P.M. 9-16-61. WOC 4 hours. No cement fill up. Drill pipe at 4580'. Spotted Plug #16 - 100 cu.ft. 1 to 1 Cement - Cal Seal 60 with 40% Diacel D, 5% Diacel A, .3% Diacel LWL. Job complete 12:30 AM 9-17-61. WOC 4 hours. No cement fill up. Spotted Plug #17 at 4580' - 100 cu. ft. of same slurry at #16. Job complete at 8:00 AM 9-17-61. WOC 4 hours - no fill up. Spotted Plug #18 at 4580'. 100 cu. ft. 1 to 1 Cement - Cal Seal 60 with 40% Diacel D, no Diacel LWL or A used. Job complete at 2:45 PM 9-17-61. Found top cement at 4342'. Filled hole with 200 barrels mud, washed out cement plug 4342-4457 and lost returns. Fluid level in hole at 1900'. Hole open to 4953'. Spotted Plug #19 at 4942', 108 cu. ft. 1 to 1 Cement - Cal Seal 60 w/40% Diacel D. Unable to displace all of cement out of drill pipe with 3000# pressure. Job complete at 10:30 AM 9-18-61. Ran open ended drill pipe to 2000', established returns with 300 barrels mud. Checked top cement plug at 4895'. Reamed and conditioned hole 4450-4895'. Drilled plug 4895 to 4951' and lost returns. Ran drill pipe to 4942' and spotted Plug #20, 100 cu. ft. 1 to 1 cement and Gilsonite with 3% CC. Job complete at 11:00 AM 9-19-61. WOC 8 hours. Checked top of plug at 4734'. Filled hole with 140 barrels mud. Ran bit to 4500'. Circulated and conditioned mud and hole. Drilled to 4947' and lost returns. Drilled to 5011 without returns. Pumped 1700 barrels mud in hole while drilling. Gas flow through 2" line at surface. Drilled to 5122' without returns. Cored 5122-32, recovered 9'. Mixing and pumping in mud. Reamed core hole. Cored 5132-46, recovered 4-1/2'. Reamed cored hole to 5146'. Drilled 5146-56'. Cored 5156 to 5168', recovered 12'. Reamed cored hole 5156-68'. Reamed cored hole to 5168'. Drilled 5168-98. Cored 5198 to 5208', full recovery. Reamed cored hole and drilled to 5213'.

Ran Schlumberger IES log. Ran Schlumberger Gamma Ray Neutron log. Drilled to 5238'. Drilled to 5608' without returns. Cored 5608' - 5624', recovered 16'. Drilled 5624 to 5669 without returns. Ran Schlumberger Gamma Ray Neutron log inside 4-1/2" drill pipe. Reamed cored hole. Drilled to 5910' without returns. Ran Schlumberger Gamma Ray Neutron 5905. Reamed 5665-5910 - Drilled 5910 to 6050 without returns. Ran Schlumberger small diameter Gamma Ray Neutron tool inside drill pipe to 6047'. Cored 6050-6052'. Recovered 6". Reamed core hole and drilled from 6052-54'. Cored 6054 to 6062', recovered 1-1/2'. Preparing to plug and abandon.

Land Office - Salt Lake  
Lease No. 071299  
Escalante Unit #2

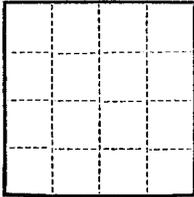
(continued)

Ran open ended 4-1/2" drill pipe to 5960'. Spotted 75 cu. ft. 50-50 Cement-Gilsonite plug at 5960-5790'. Job complete 11:30 P.M. 10-30-61. WOC 6 hours. Mixed mud and lost circulation materials. Mud weight 8.5#. Ran 4-1/2" open ended drill pipe to 4900'. Pumped 100 barrels mud through drill pipe. Spotted plug No. 2, 150 cu. ft. 50-50 Cement-Gilsonite at 4950'. Job complete 6:00 A.M. 10-31. Pulled drill pipe up into 9-5/8" casing. Laid down 45 jts. 4-1/2" drill pipe. WOC 6 hours. Ran drill pipe. Checked top plug No. 2 at 4875'. Filled hole to surface with 8.5# mud.

Spotted Plug No. 3, 75 cu. ft. 50-50 Cement-Gilsonite at 3130' to 3070'. Job complete at 1:30 P.M. 10-31-61. Pulled 4-1/2" drill pipe. Ran 9-5/8" Halliburton magnesium bridge plug. Set at 2500'. Spotted 50 sacks regular cement in bottom of 9-5/8" casing at 2500' to 2350'. Job complete at 10:00 P.M. 10-31-61.

Laid down 4-1/2" drill pipe. Hole full of mud. Spotted 20 sacks cement plug in 9-5/8" casing through 1" pipe at 60' to surface and filled cellar. Well plugged and abandoned 4:00 P.M. November 1, 1961. Rig released 6:00 P.M. 11/1/61. All casing left in hole - none pulled.

13-3/8" casing set at 1076' and cemented to surface was left in hole.  
9-5/8" casing set at 2607.4' and cemented to 1105' was left in hole.  
13-3/8" casing head was left on well. 1/2" steel plate welded in top of 9-5/8" casing and permanent 4-1/2" OD pipe well marker installed.



(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office Salt Lake  
Lease No. 071299  
Unit Escalante

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO ABANDON WELL.....	<b>Subsequent Report of Abandonment</b>	<b>X</b>

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Cortez, Colorado November 9 1961

Escalante Unit #2

Well No. 2 is located 682 ft. from XXX line and 2384 ft. from XXX line of sec. 29  
SE/4, SW/4 29 32S 3E S1E4  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
Wildeat Garfield Utah  
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 8371 ft. *Graded Ground 8361.5*

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Ran open ended 4-1/2" drill pipe to 5960'. Spotted 75 cu.ft. 50-50 Cement-Gilsonite plug at 5960-5790'. Job complete 11:30 P.M. 10-30-61. WOC 6 hours. Mixed mud and lost circulation materials. Mud weight 8.5#. Ran 4-1/2" open ended drill pipe to 4900'. Pumped 100 barrels mud through drill pipe. Spotted Plug No. 2, 150 cu. ft. 50-50 Gilsonite-Cement at 4950'. Job complete at 6:00 A.M. 10-31 61. Pulled drill pipe up into 9-5/8" casing. Laid down 45 jts 4-1/2" drill pipe. WOC 6 hours. Ran drill pipe. Checked top Plug #2 at 4875'. Filled hole to surface with 8.5# mud. Spotted Plug No. 3, 75 cu.ft. 50-50 Gilsonite-Cement at 3130' to 3070'. Job complete at 1:30 PM 10-31-61. Pulled 4-1/2" drill pipe. Ran 9-5/8" Halliburton magnesium bridge plug. Set at 2500'. Spotted 50 sacks regular cement in bottom of 9-5/8" casing at 2500' to 2350'. Job complete at 10:00 P.M. 10-31-61.

(Continued on back side)

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company PHILLIPS PETROLEUM COMPANY

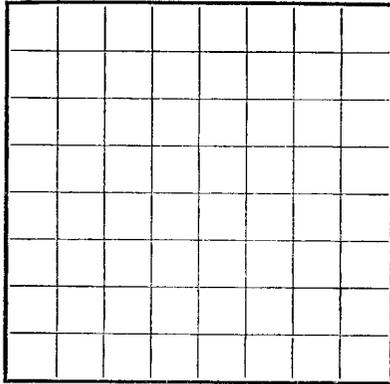
Address P. O. Drawer 1150  
CORTEZ, COLORADO

By C. M. Boles  
Title District Superintendent



U. S. LAND OFFICE Salt Lake  
SERIAL NUMBER 071299  
LEASE OR PERMIT TO PROSPECT Escalante

14



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company Phillips Petroleum Company Address Box 1150, Cortez, Colorado  
Lessor or Tract Escalante Unit Field Wildcat State Utah  
Well No. 2 Sec. 29 T. 32S R. 3E Meridian SLB County Garfield  
Location 682 ft. N of 3 Line and 238A E of 1 Line of Sec. 29 Elevation 8371  
(Detrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed C. M. Boles  
Date November 9, 1961 Title District Superintendent

The summary on this page is for the condition of the well at above date.  
Commenced drilling 6-30-61 Finished drilling October 29, 1961

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from \_\_\_\_\_ to \_\_\_\_\_ No. 4, from \_\_\_\_\_ to \_\_\_\_\_  
No. 2, from \_\_\_\_\_ to \_\_\_\_\_ No. 5, from \_\_\_\_\_ to \_\_\_\_\_  
No. 3, from \_\_\_\_\_ to \_\_\_\_\_ No. 6, from \_\_\_\_\_ to \_\_\_\_\_

IMPORTANT WATER SANDS. \* - See Bottom of Page

No. 1, from \_\_\_\_\_ to \_\_\_\_\_ No. 3, from \_\_\_\_\_ to \_\_\_\_\_  
No. 2, from \_\_\_\_\_ to \_\_\_\_\_ No. 4, from \_\_\_\_\_ to \_\_\_\_\_

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From	To	
36"			1611	Corrugated conductor	no shoe				
20"	57.6	3 1/2	Araco	114	Howco				
13-3/8"	48	8 rd	H-40	1009	"				
9-5/8"	32.3	8 rd	H-40	2589	"				
9-5/8"	36	8 rd	J-55						
9-5/8"	40	8rd							

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
36"	21'	35 sbs	Surface		
20"	118'	2500 cu. ft. 2% CC, 1 1/2% sk. Flocco	circulated		
13-3/8"	1076'	1000 cu. ft. 2% CC, 1 1/2% sk. Flocco	followed w/150 sk. reg. cem, 2% CC-circ.		
9-5/8"	2607'	1728 cu. ft. 20% 2% sk. Flocco	followed w/200 sk. Tuff Plug, 1 1/2% sk. Flocco, 2% CC,		

Heaving plug—Material \_\_\_\_\_ Length \_\_\_\_\_ Depth set \_\_\_\_\_  
Adapters—Material \_\_\_\_\_ Size \_\_\_\_\_

SHOOTING RECORD

FOLD MARK

**MUDDING AND CEMENTING RECORD**

FOLD MARK

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
36"	21'	35 sks	Surface		
20"	118'	2500 ex cem, 2% CC, 1/2 sk. Floccula	circulated		
1 7/8"	1076'	1000 cu. ft. Disc. D, 2% CC, 1/2 sk. Floccula	followed w/150 sk reg cem, 2% CC-circ		
1 5/8"	2607'	1728 cu. ft. 20% Disc. D, w/2 1/2 sk. Tuff Plug, 1/2 sk. Floccula, 2% CC	followed w/200 sk PLUGSTAN, DISPERSEMENT.		

Heaving plug—Material \_\_\_\_\_ Length \_\_\_\_\_ Depth set \_\_\_\_\_  
 Adapters—Material \_\_\_\_\_ Size \_\_\_\_\_

**SHOOTING RECORD**

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

**TOOLS USED**

Rotary tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet

Cable tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet

**DATES**

November 9, 19 61 \_\_\_\_\_ Pflugged & abandoned Nov 1, 19 61

The production for the first 24 hours was \_\_\_\_\_ barrels of fluid of which \_\_\_\_\_ % was oil; \_\_\_\_\_ % emulsion; \_\_\_\_\_ % water; and \_\_\_\_\_ % sediment. Gravity, °Bé. \_\_\_\_\_

If gas well, cu. ft. per 24 hours \_\_\_\_\_ Gallons gasoline per 1,000 cu. ft. of gas \_\_\_\_\_

Rock pressure, lbs. per sq. in. \_\_\_\_\_

**EMPLOYEES**

\_\_\_\_\_, Driller \_\_\_\_\_, Driller  
 Mountain States Drilling Co. \_\_\_\_\_, Driller \_\_\_\_\_, Driller

**FORMATION RECORD**

FROM—	TO—	TOTAL FEET	FORMATION
Surface	370	370	Navajo
370	628	258	Kayenta
628	894	266	Wingate
894	1337	443	Chinle
1337	1552	215	Shinarump
1552	2194	642	Monekopi
2194	2277	83	Timpoweap
2277	2588	311	Kaibab
2588	3022	4 34	Toroweap
3022	4168	1146	Coconino
417			
4168	4843	675	Honaker Trail
4843	4887	44	Molas
4887	5932	1045	Mississippian
5932	6062	130	Ouray

**\*IMPORTANT WATER SANDS:** Salt water in 2 Lower Pennsylvanian sands at 4850-59 and 4868-75 and from the Mississippian limestone from 4887 to 4918. Due to the lack of geological information below a depth of 5005, we do not know the fluid content of ~~max~~ porosity below this depth but would assume it to also be water bearing.





Land Office - Salt Lake  
Lease No. 071299  
Escalante Unit #2

(continued)

Drilled 12-1/4" hole 2772' to 2800' with conventional bit. Drilled 2800' to 3440' with Mission Hammer Drill and Reed Percussion Bit (8-3/4" hole). Well started making non-flammable gas - increased while drilling 3182' to 3355' to 2.3 MMCFPD - uncorrected temperature and gravity at 3355' measured flow with pitot tube 1 hr. and 15 minutes. Shut in Pressure 103#.

At 3389' had increased flow to estimated 10 MMCFPD. Stopped drilling at 12:00 noon 8/8/61 to run Temperature Survey to determine if gas flow from Coconino or if squeeze job around 9-5/8" casing shoe leaking Kaibab gas. Ran Schlumberger Temperature Survey. Gas entering hole in Coconino at 3370' to 3420'. Pitot tube measurement of gas flow 8 MMCFPD.

Drilled 8-3/4" hole with conventional bit from 3440'. Had non-flammable increase at 3554' to 17.9 MMCFPD at 3723'; had increase to 23.6 MMCFPD - uncorrected for gravity and temperature. SIP 138#. Had estimated 20 barrels salt water - believe water entering hole from formation with drilling breaks between 4842-87'. Had estimated 900' water in hole at 4918'. Estimate water production 9 to 10 BPH while drilling. Had drilling break at 4987-95'. Water production increased to estimated 20 BPH. Made trip at 5005'. Unable to unload water after trip. Air going into formation. Pulled bit. Started rigging up for mud circulation- established returns. Drilled through bridge at 4840' and lost returns. Gas flow returned after losing returns. Checked fluid level at 4430'. Pulled bit. Ran open ended drill pipe to 4725' (TD 5005). Spotted Plug No. 1 100 sks cement with 4#/sk. Tuff Plug, 2% Calcium Chloride. Job complete at 6:00 P.M. 9/1/61. W.O.C. 8 hours. Ran bit, found top cement plug at 4821'. Mixed and pumped 1200 bbls mud with lost circulation material. Gas flow killed after pumping 900 bbls mud. Established full returns with 1200 bbls. Started in hole to drill cement plug. Found bridge at 4794'. Drilled small bridge at 4794' - lost 20 barrels mud. Drilled cement plug at 4821' to 4860' and bridge at 4860' to 4880'. Lost returns at 4880'. Pumped in 200 barrels mud with lost circulation material and established partial returns, losing 50 bbls/hour. Pulled bit. Ran drill pipe open ended to 4875'. Spotted Plug No. 2 - 50 sks. regular cement with 5# Tuff Plug per sack, 2% Calcium Chloride. Job complete at 2:00 P.M. 9/3/61. Gas did not return prior to spotting plug. W.O.C. 8 hours. Filled hole and established full returns with 75 barrels mud. Drilled cement plug 4871' to 4891' and lost returns. Pumped in 200 barrels mud and lost circulation material and did not establish returns. Pulled bit. Ran drill pipe open ended. Found small bridge at 4874'. Washed out bridge and lowered drill pipe to 4891' in open hole. Pulled up and mixed additional mud in pits. Lowered open ended drill pipe to 4875'. Spotted Plug #3 - 50 sks. cement with 4# Tuff Plug per sack, 2% Calcium Chloride. WOC 8 hours. Filled hole with 200 barrels mud. Ran bit, found top of plug at 4871', drilled cement plug 4871' to 4899' with no loss of returns. Complete loss of returns at 4899'.

(Continued on page 3)

Land Office - Salt Lake  
Lease No. 071299  
Escalante Unit #2

(Continued from page 2)

Ran drill pipe open ended. Found bridge at 4895'. Filled hole with 50 barrels mud. Washed out bridge to 4905' and lost returns. Pulled open ended drill pipe up to 4875'. Spotted #4 Plug - 50 sks cement with 4# Tuff Plug/sk., 2% Calcium Chloride. Job complete at 6:00 A.M. 9-5-61. WOC 4 hours. Filled hole with 100 barrels mud. Ran bit. Washed out heavy mud and lost circulation material at 4835' to 4866'. Drilled hard cement plug 4866' to 4915'. Lost circulation and stuck pipe at 4915'. Worked pipe and pumped small amount of mud intermittently through pipe 4 hours and worked pipe loose. Gas flow from upper formation resumed while pulling out of hole. Ran open ended drill pipe. Washed out small bridges at 4870' and 4885'. Ran pipe to 4946'. Hole clear to 4946'. Pulled pipe up to 4935'. Spotted Plug No. 5 - 100 cu. ft. of 50-50 regular cement and Cal Seal 60 with 40% Diacel "D", 5% Diacel "A", .5% Diacel LWL. Job complete at 4:15 A.M. 9/6/61. Pulled pipe up into 9-5/8" casing. WOC 6 hours. Ran open ended drill pipe. Took weight at 4951'. Pulled up to 4935'. Spotted Plug #6 identical to Plug #5. Job complete 11:00 A.M. 9-6-61. WOC 3 hours. Ran open ended drill pipe. Washed without returns 4950-56'. Took 20,000# weight at 4956'. Pulled up to 4935'. Spotted Plug #7 identical to Plugs No. 5 and No. 6. Job complete at 2:45 P.M. 9-6-61. W.O.C. 4 hours.

Ran open ended drill pipe. Took weight at 4954'. Pulled up to 4935' and spotted Plug #8 - 50 sks regular cement with 23% Cal Seal 120, 4# Tuff Plug per sack. Job complete at 7:00 P.M. 9-6-61. W.O.C. 5 hours. Mud column still below gas zone. Ran open ended drill pipe. Found top of plug at 4874'. Pulled drill pipe up into 9-5/8" casing. Mixed and pumped 680 barrels mud with lost circulation material and established returns. Gas flow dead after pumping 300 barrels. Pulled drill pipe, ran bit to bottom of 9-5/8" casing. Drilled cement plug to 4884' losing estimated 30 barrels mud per hr. Drilled cement plug 4884' to 4934'. Lost 108 barrels mud while drilling plug, complete loss of returns at 4934'. Gas flow from upper formation returned. Pumped in 200 barrels mud with L.C.M. Established returns. Had continuous mud loss, but not severe. Established returns with 90 barrels. Drilled cement 4934-55' and ran out of mud. Mixed and pumped 500 barrels mud and LCM and did not establish returns. Gas flow returned. Ran drill pipe open ended to 4950'. Spotted Plug #9 - 50 sks regular cement with 20% Cal Seal 120, 2% Calcium Chloride. Job complete at 2:30 A.M. 9-10-61. Pulled drill pipe up in 9-5/8" casing. WOC 6 hours. Mixed and pumped 680 bbls mud and LCM and established returns. Drilled cement plug 4871-80'. Lost 90 barrels mud. Drilled 4880' to 4912' with full returns. Drilled to 4931 and lost returns. Mixed and pumped 400 barrels mud and LCM and unable to regain circulation. Ran open ended drill pipe to 4931'. Spotted Plug #10 - 100 cu.ft. of 1 to 1 Cement-Gilsonite with 3% Calcium Chloride. Job complete at 4:30 AM 9-13-61. Ran open ended drill pipe to 4920'. Spotted Plug No. 11 - 100 cu. ft. 1 to 1 Cement-Gilsonite with 3% Calcium Chloride. Job complete at 6:00 A.M. 9-14-61. WOC 8 hrs. Filled hole with 90 barrels. Ran bit. Found top of plug at 4860'. Drilled plug 4860'-4895' with full returns. Drilled cement plug 4895-4951' and lost returns. Drilled to 4953' without returns. Gas flow returned. Ran open ended drill pipe to 4940. Spotted Plug No. 12 - 100 cu.ft. 1 to 1 Cement-Gilsonite with 3% CC. Job complete at 1:30 PM 9-15-61. WOC 4 hours. No cement fill up.

(Continued on page 4)

Land Office - Salt Lake  
Lease No. 071299  
Escalante Unit No. 2

(Continued from Page 3)

Spotted Plug #13, 108 cu. ft. of 1 to 1 Cement and Cal Seal with 40% Diacel "D" with .5% LWL, 5% Diacel "A". Job complete at 6:00 P.M. 9-15-61. WOC 6 hours. Ran drill pipe to 4953', pulled to 4940' and spotted Plug #14 - 100 cu. ft. 1 to 1 Cement-Gilsonite with 3% CC. Job complete 1:00 A.M. 9-16-61. WOC 6 hours - no cement fill up. Mixed and pumped 80 barrels heavy LCM slug. Waited 1 hour. Mixed and pumped 40 barrels heavy LCM slug with bottom drill pipe at 4940'. Spotted Plug #15, 126 cu. ft. Cement with 2% Gel, 1-1/2% Calcium Chloride, 13.5#/gallon slurry. Job complete 2:00 P.M. 9-16-61. WOC 4 hours. No cement fill up. Drill pipe at 4580'. Spotted Plug #16 - 100 cu. ft. 1 to 1 Cement - Cal Seal 60 with 40% Diacel D, 5% Diacel A, .3% Diacel LWL. Job complete 12:30 AM 9-17-61. WOC 4 hours. No cement fill up. Spotted Plug #17 at 4580' - 100 cu. ft. of same slurry as #16. Job complete at 8:00 AM 9-17-61. WOC 4 hours - no fill up. Spotted Plug #18 at 4580'. 100 cu. ft. 1 to 1 Cement - Cal Seal 60 with 40% Diacel D, no Diacel LWL or A used. Job complete at 2:45 PM 9-17-61. Found top cement at 4342. Filled hole with 200 barrels mud, washed out cement plug 4342-4457 and lost returns. Fluid level in hole at 1900'. Hole open to 4953'. Spotted Plug #19 at 4942', 108 cu. ft. 1 to 1 Cement - Cal Seal 60 with 40% Diacel D. Unable to displace all of cement out of drill pipe with 3000# pressure. Job complete at 10:30 AM 9-18-61. Ran open ended drill pipe to 2000', established returns with 300 barrels mud. Checked top cement plug at 4895'. Reamed and conditioned hole 4450-4895'. Drilled plug 4895 to 4951' and lost returns. Ran drill pipe to 4942' and spotted Plug #20, 100 cu. ft. 1 to 1 cement and Gilsonite with 3% CC. Job complete at 11:00 AM 9-19-61. WOC 8 hours. Checked top of plug at 4734'. Filled hole with 140 barrels mud. Ran bit to 4500'. Circulated and conditioned mud and hole. Drilled to 4947' and lost returns. Drilled to 5011 without returns. Pumped 1700 barrels mud in hole while drilling. Gas flow through 2" line at surface. Drilled to 5122' without returns. Cored 5122-32, recovered 9'. Mixing and pumping in mud. Reamed core hole. Cored 5132-46, recovered 4-1/2'. Reamed cored hole to 5146'. Drilled 5146-56'. Cored 5156 to 5168', recovered 12". Reamed cored hole 5156-68'. Reamed cored hole to 5168'. Drilled 5168-98. Cored 5198 to 5208', full recovery. Reamed cored hole and drilled to 5213'.

Ran Schlumberger IES log. Ran Schlumberger Gamma Ray Neutron log. Drilled to 5238'. Drilled to 5608' without returns. Cored 5608' - 5624', recovered 16'. Drilled 5624 to 5669 without returns. Ran Schlumberger Gamma Ray Neutron log inside 4-1/2" drill pipe. Reamed cored hole. Drilled to 5910' without returns. Ran Schlumberger Gamma Ray Neutron 5905. Reamed 5665-5910 - Drilled 5910 to 6050 without returns. Ran Schlumberger small diameter Gamma Ray Neutron tool inside drill pipe to 6047'. Cored 6050-6052'. Recovered 6". Reamed core hole and drilled from 6052-54'. Cored 6054 to 6062', recovered 1-1/2'. Preparing to plug and abandon.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

LAND OFFICE Salt Lake 071299  
LEASE NUMBER Escalante  
UNIT .....

**LESSEE'S MONTHLY REPORT OF OPERATIONS**

State Utah County Garfield Field Wildcat

The following is a correct report of operations and production (including drilling and producing wells) for the month of November, 1961

Agent's address P O Drawer 1150 Company PHILLIPS PETROLEUM COMPANY  
Cortez, Colorado Signed C. M. Boles

Phone 565-3426 Agent's title District Superintendent

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
<b>ESCALANTE UNIT</b>										
SE SW 29	32S	3E	2							TD6062 Well plugged and abandoned 11-2-61
<b><u>FINAL REPORT</u></b>										

NOTE.—There were ..... runs or sales of oil; ..... M cu. ft. of gas sold;

..... runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

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

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1. oil well  gas well  other Re-Entry  
~~Abandoned Well~~

2. NAME OF OPERATOR ARCO Oil and Gas Company  
Division of Atlantic Richfield Company

3. ADDRESS OF OPERATOR  
P.O. Box 5540, Denver, Colorado 80217

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
682' FSL, 2384' FWL  
AT SURFACE: Sec. 29-T32S-R3E *se DW*  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

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

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

5. LEASE  
U 38347

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
NA

7. UNIT AGREEMENT NAME  
NA

8. FARM OR LEASE NAME  
Escalante Unit

9. WELL NO.  
2

10. FIELD OR WILDCAT NAME  
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 29-T32S-R3E

12. COUNTY OR PARISH  
Garfield

13. STATE  
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)  
8371' DF

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

**APPROVED BY THE DIVISION  
OF OIL, GAS, AND MINING**  
DATE: 7-2-80

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state pertinent wells 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.)\*

Rig up to Drill out cmt plug from 0 - 60', cmt and bridge plug from 2350' - 2500', cmt plug at 3070' - 3130'. Circulate and clean out existing wellbore to approximately 3300'. Spot 75 sx cmt plug from 3300' to 3250'. Run Caliper log from PBDT to Bottom of 9-5/8" csg to determine packer seat for DST of Coconino Formation. Conduct test of Coconino Formation from 2950' - 3100' to determine formation pressures.

EXHIBITS ATTACHED:

- A. Ten Point Compliance Program
- B. Blowout Preventer Diagram
- C. Multi-Point Requirements for A.P.D.
- D. Access Roads to location
- E. Radius Map of Area
- F. Wellsite Layout

**RECEIVED**

JUN 23 1980

DIVISION OF  
OIL, GAS & MINING

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

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

SIGNED W. A. Walther, Jr. TITLE Operations Manager DATE June 20, 1980

(This space for Federal or State office use)

APPROVED BY H. J. Minder TITLE Patrol Eng. DATE 7-2-80  
CONDITIONS OF APPROVAL, IF ANY:

65

Natural Resources Input

June 7, 1980

2820 Leases and Permits  
Arco-Escalante #2

Affected Environment

The present environment of the proposed project is one of a rehabilitated project that is stable for the most part. The prior drilling project consisted of an access road and drill pad. There has been some environmental degradation from plugged culverts and water running off the pad whichhead cut the road. However, the pad and access road have generally been revegetated and stabilized.

Effects of Implementation

Alternative "A" - No change

Same as "Affected Environment" section.

Alternative "B" - Allow access to existing pad location via the road up the Sand Creek drainage.

The vegetation and organic matter that has stabilized the existing facilities will be removed, thus setting plant succession back and rendering the site vulnerable to erosion. Wildlife sanctuary along this stream bottom will be interrupted for the project duration.

Improved drainage from project reconstruction will prevent some of the erosion that is now taking place.

Any time an area is opened up to a project and/or motor vehicle access, litter and foreign debris become an unsightly and sanitary problem.

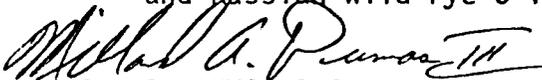
Issues and Concerns

1. Destruction of existing vegetation within the road that has rehabilitated the disturbed site.
2. The removal of trees that have rehabilitated the existing drill pad.
3. Debris and litter that could be brought in by opening the area up.
4. Stability of facilities following completion of project.

Mitigating Requirements

1. The road will be bladed only where necessary to allow vehicles to travel safely; thus, leaving the existing vegetation and root crowns to rehabilitate the road. A draft hose will be used to transport water from the creek to the drill pad which will reduce vegetative damage due to excessive vehicular traffic.

2. The drill rig should be placed on the pad in a manner that will protect the larger ponderosa pine saplings that have inhabited the pad. Portable tanks will be used for water and mud storage to avoid excessive disturbance from pond construction.
3. All debris and litter brought into the area while the road is open will be the responsibility of ARCO.
4. Following completion of the drilling project the road and pad will be maintained, seeded, and closed to Forest Service standards. (Seed mixture: Crested wheat 5 lbs/ac, smooth brome 5 lbs/ac. and Russian wild rye 5 lbs/ac.)

  
MILLARD A. DUMAS III  
Supervisory Forester

## Affected Environment

The Arco-Escalante #2 drill site proposal is located approximately 1 1/2 miles up Sand Creek. The site was previously accessed and developed in the mid sixties when exploratory drilling was originally accomplished. An existing road extends from the Hells Backbone Road (F.S. #30153) to the existing pad location. The road has not been maintained for several years, but with the exception of several drainage problems, is in fair condition. The road traverses through a variety of soil types consisting mainly of sands and clays. Without surfacing, trafficability problems could be expected.

The Grimes Creek Timber Sale, which is scheduled to be sold in F.Y. 81, encompasses the area. The proposed road access to the pad location will be needed to harvest timber from the Sand Creek drainage when timber is harvested from the area.

Without the proposal the area will remain basically unchanged except for timber harvest activities. Washouts and plugged culverts would be corrected under the timber sale contract and erosion hazards would be lessened at that time.

## Effects of Implementation

Alternative "A" - No change.

Same as "Affected Environment" section.

Alternative "B" - Allow access to existing pad location via road up Sand Creek drainage.

Access to the existing pad site can be readily provided by placing additional culverts and dips at designated locations and doing minor reshape and finish work to the existing road. The road is approximately 14 feet wide, contains both outsloped and ditched sections, and varies gradewise between 0 and 10%. A thin shale type surfacing has been placed on select portions of the road and should be adequate for limited use.

The first live water crossing has washed out and will require the re-installation of a 24" culvert. The culvert existing at the washout appears to be in good condition and may be adequate for re-installation if it proved to be undamaged when its removed. The flow of the stream should be diverted back into its original channel and the roadbed reshaped to its original cross-section.

In two places, side drainages enter the roadway in through cut sections. The first of these areas should be dipped at the wash location, and ditched along the lower side of the road to the drainage just below the wash area.

The second area should be dipped at the wash location and a flare ditch constructed from the bottom of the dip to the original wash location on the lower side of the road.

The second live water drainage has also washed out. A new 36' C.M.P. should be placed at this location and realigned to go where the washout has occurred. In addition to the above mentioned culverts, three additional 18 inch culverts are needed at locations flagged along the existing road. The first of these culverts will require the construction of approximately 100 feet of roadside ditch and the upper most culvert will require approximately 50 feet of outlet ditch.

The road just before reaching the pad location has been partially eroded away. This section will have to be reconstructed to match the rest of the existing road. Borrow material to reconstruct the road may be obtained from the lower through cut areas by laying the cut slopes back to a 1 1/2 or 2:1 slope. To prevent future erosion of this area, the pad location should be ditched on the south and west sides. The ditch on the south side should extend to the proposed culvert location located just below the pad. The ditch on the west should be extended in a northerly direction so that runoff will be diverted to the drainage north of the pad location.

All culvert inlets associated with existing pipe need to be cleaned and catch basins reconstructed. Riprap should be placed on all cutout inlets and outlets as shown on the attached pipe installation sheets. The existing road should be lightly bladed where needed to remove sluffed off rock etc., and all ditches need to be recut to improve drainage. Several dips are needed in the outsloped sections of road. These will be located by the Forest Service prior to work on the road. The second major culvert where the road crosses Sand Creek needs additional riprap and dirt placed around the outlet to prevent ongoing undercutting of the pipe.

#### Issues and Concerns

- 1) Lack of drainage considerations is causing unnecessary erosion and damage to the existing road.
- 2) Location of pipelines, power lines, etc. should be carefully considered if the well is developed as a producer.

#### Mitigating Requirements

1. All road work shall be in accordance with "Forest Service Standard Specifications for Construction of Roads and Bridges", 1979 edition, and the attached drawings.
2. Additional culverts and dips shall be placed to control runoff and lessen erosion impacts. All culverts in dry drainages should be placed so that a minimum flow line grade of 5% is maintained. Culverts

in live drainages should be placed as shown on the attached drawings.

3. If the testing procedure results in the development of a producing well, additional surfacing should be placed on the road to handle the increased traffic.
4. If a pipeline or power source is proposed, the utilities should be placed in the same corridor as the road, but not in the "traveled way" of the road. Additional input from the Forest Service should be provided if this situation arises.

Oil and Gas Drilling

EA No. 575-80

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

USUAL ENVIRONMENTAL ASSESSMENT

Date August 29, 1980

Operator ARCO Oil & Gas Co. Well No. Escalante #2  
Location 682' FSL, 2384' FWL Section 29 Township 32S Range 3E  
County Garfield State Utah Field/Unit Wildcat  
Lease No. U-38347 Permit No. \_\_\_\_\_

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

Joint Field Inspection Date: August 8, 1980

Field Inspection Participants, Titles, and Organizations:

<u>Glenn Doyle</u>	<u>U. S. Geological Survey</u>
<u>Millard Dumas</u>	<u>U. S. Forest Service</u>
<u>Lincoln Lyman</u>	<u>Dirt Contractor</u>
<u>Jack McCarthy</u>	<u>Operator</u>
_____	_____
_____	_____
Typing In: <u>8/29</u>	_____
Out: <u>9/5</u>	_____

Related Environmental Documents:

USFS Natural Resources Input, Dixie National Forest.

*Admin Comp 2,  
Pcd 120 x 180  
Pit 14 x 42  
1mi x 18' upgrade exist road  
2 3/10 ac  
→ Cond 7 Appr  
Arch cler & T&E  
f USFS*

## DESCRIPTION OF PROPOSED ACTION

Proposed Action:

1. Location State: Utah  
County: Garfield

682 ' F S L, 2384 ' F W L, SE ¼ SW ¼  
Section 29, T32S, R3E, SLBM

2. Surface Ownership Location: Public  
Access Road: Public

Status of Reclamation Agreements: Not Applicable

3. Dates APD Filed: July 14, 1980  
APD Technically Complete: July 24, 1980  
APD Administratively Complete: *July 14, 1980*

4. Project Time Frame Starting Date: September 1980  
Duration of drilling activities: 21 days.

A period of 30 to 60 days is normally necessary to complete a well for production if hydrocarbons are discovered. If a dry hole is drilled, recontouring and reseedling would normally occur within one year; revegetation or restoration may take several years. If the well is a producer, an indefinite period of time would occur between completion and rehabilitation.

5. Related actions of other federal or state agencies and Indian tribes:

None known

6. Nearby pending actions which may affect or be affected by the proposed action:

None known

7. Status of variance requests:

None known

The following elements of the proposed action would/could result in environmental impacts:

1. A drill pad 120' wide x 180' long and a reserve pit 14' x 40' would be constructed on a previously constructed wellsite. Approximately one mile of existing road would be reconstructed to an average width of 18'. Culverts will be installed as specified by the Forest Service. Approximately 2.18 acres of disturbed surface would be associated with the project.

A workover rig will be used to drill out the existing cement plugs in the hole. ARCO plans to test for CO<sub>2</sub> gas.

2. Drilling to a depth of 3300'.

3. Waste disposal would be contained in a trash pit.
4. Traffic would be restricted to existing roads and the disturbed surface of the pad only.
5. Water requirements
6. Completion
7. Production

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

The access road would be designed as per USFS recommendations.

Environmental Considerations of the Proposed Action:

Regional Setting/Topography - The wellsite lies on an erosional slope at the base of cliffs which flank the Aquarius Plateau on the east. Regionally, steep topography surrounds the site, eventually grading into deeply-incised canyonlands-type relief.

PARAMETER

A. Geology - Surface is the Navajo Sandstone. Other formations are listed in the 10-Point Subsurface Plan.

Information Source: Application to Drill.

1. Other Local Mineral Resources to be Protected: None reported.

Information Source: ME, District Geologist.

2. Hazards:

a. Land Stability: Location and access built on Navajo Sandstone. Material is stable, provided the slopes are moderate and moisture content is low.

Information Source: Field observation.

b. Subsidence: Subsidence <sup>could</sup> can occur with the withdrawal of oil, gas, and/or water.

Information Source: Keller, Edward A., 1976, Environmental geology, Charles E. Merrill, 488 pp.

c. Seismicity: Seismic risk: low. Statistically, greatest damage would be moderate, corresponding to intensity VII of Modified Mercalli Intensity Scale, 1931.

Information Source: Algermissen, S. T., and Perkins, David M., 1977, Earthquake hazards map of the United States, Reprint from Earthquake Information Bulletin, 9(1) Jan-Feb., 4 pp.;

Perkins, David M., 1974, Seismic risk maps, Reprint of Earthquake information bulletin, 6(6) Nov-Dec.; von Hake, Carl A., Earthquake History of Utah, NOAA.

- d. High Pressure Zones/Blowout Prevention: No high pressure zones expected. Blowout prevention systems detailed in APD.

Information Source: Application to Drill.

## B. Soils

1. Soil Character: Soils are of a sandy-loam texture, probably well-drained and slightly alkalic, and support the subalpine-alpine pine and aspen communities.

Information Source: Field observation.

2. Erosion/Sedimentation: Erosion/sedimentation would increase as would runoff potential. Extent of increases unpredictable without site-specific studies being done. Waterbarring of the roads, ditching of the sides, and the installation of culverts as per USFS specifications would minimize erosion and runoff.

Information Source: Field observation.

- C. Air Quality - Wellsite lies in Class II attainment area. No Class I attainment areas are near, or adjacent to, proposed location.

Information Source: State of Utah

- D. Noise Levels - Ambient noise levels will be temporarily increased over the duration of drilling activity. Wildlife will avoid immediate area. After well completion, if well is dry hole, noise levels will return to nearly the predrill ambient levels. If the well produces marketable quantities of oil or gas, noise levels will rise periodically above predrill ambient levels.

Information Source: Field observation.

## E. Water Resources

### 1. Hydrologic Character

- a. Surface Waters: No significant impacts to surface water systems are expected, provided the operator maintains all adverse substances either on the pad or in a fluid-tight reserve pit. Minor increases in sediment load, resulting in siltation/sedimentation, could occur in nearby intermittent drainages.

Information Source: Field observation.

- b. Groundwaters: The White Rim Sandstone, the Navajo, and the Wingate Formations may contain usable waters which should be sampled if encountered.

Information Source: ME, District Geologist.

## 2. Water Quality

a. Surface Waters: Impacts to surface water quality are judged as insignificant, provided the operator maintains a fluid-tight reserve pit.

Information Source: Field observation.

b. Groundwaters: Operator proposes 1076' of surface casing. Commingling of drilling fluids with potentially usable water could render groundwater unusable. Pits would be unlined.

Information Source: Application to Drill and Field observation.

## F. Flora and Fauna

### 1. Endangered and Threatened Species Determination

Based on the field comments received from the USFS on August 8, 1980, we determine that there would be no effect on endangered and threatened species and/or their critical habitat.

2. Flora: Construction would remove about 2.18 acres of vegetation increasing potential for non-point erosion and decreasing soil fertility.

Information Source: Field observation.

3. Fauna: Vegetation removal reduces wildlife habitats and food sources. Deer are not known to winter in the area. No known migratory bird nesting areas, strutting or breeding grounds, or fish-spawning areas would be impacted by proposed action.

Information Source: USFS

## G. Land Uses

1. General: Timber cutting, recreation and minor grazing are the major land uses. The amount and the quality of land available to livestock, wildlife, and recreationists would be reduced. Timber access would be improved.

Information Source: Field observation.

2. Affected Floodplains and/or Wetlands: N/A

Information Source: Field observation.

H. Aesthetics: Operation would not blend with natural surroundings. Most likely unappealing to recreationists. Impact duration: life of well.

Information Source: Field observation.

I. Socioeconomics: The effect of one well on local and regional population and economy would be considered minor. If major discovery, then consider: Population increase, community services taxed, resources depleted, cumulative impacts multiply, pipelines and transportation routes expand.

Information Source: G. Doyle, Environmental Scientist, USGS.

J. Cultural Resources Determination: Based on the field comments received from the USFS on August 8, 1980, we determine that there would be no effect on cultural resources subject to no stipulations.

Information Source: U. S. Forest Service

K. Adequacy of Restoration Plans: Rehabilitation plan meets the minimum NTL-6 requirements and must meet further USFS requirements.

Information Source: G. Doyle, Environmental Scientist, USGS.

Alternatives to the Proposed Action:

1. Disapproving the proposed action or no action - If the proposed action is denied, no action would occur, the existing environment would remain in its present state, the lessee/operator would not realize any return on investments and the public would be denied a potential energy source.

2. Approving the project with the recommended stipulations - Under federal oil and gas leasing provisions, the Geological Survey has a responsibility to approve mineral development if the environmental consequences are not too severe or irreversible. Permanent damage to the surface and subsurface would be prevented as much as possible under USGS and Surface Management Agency supervision. Environmental impacts would be significantly mitigated.

Adverse Environmental Effects:

1. If approved as proposed:

a. About 2.18 acres of vegetation would be removed, increasing and accelerating erosion potential.

b. Pollution of groundwater systems <sup>could</sup> occur with the introduction of drilling fluids into the aquifer(s). The potential for interaquifer leakage and lost circulation is ever-present, depending on the casing program.

c. Minor air pollution would be induced on a temporary basis due to exhaust emissions from rig engines and support traffic.

d. The potential for fires, leaks, spills of gas and oil or water exists.

e. During construction and drilling phases of the operation, noise and dust levels would increase.

f. Distractions from aesthetics during the lifetime of the project would exist.

g. Erosion from the site would eventually be carried as sediment in the Escalante River. The potential for pollution would exist through leaks and spills.

h. If hydrocarbons would be discovered and produced, further development of the area could be expected to occur, which would result in the extraction of an irreplaceable resource, and further negative environmental impacts. These impacts include the cumulative loss of wildlife habitat due to the areas necessary for roads, pipelines, drillsites, and transmission lines. These actions may disrupt wildlife social behavior and force habitat relocation over an extended period of time. In addition, the cumulative effects of non-point erosion become substantial in a developing field, primarily those located near perennial streams where siltation and sedimentation are critical to aquatic life cycles.

i. Other: Wildlife and livestock could be endangered by toxic or hazardous fluids in the reserve pit if it is not properly fenced.

2. Conditional approval

a. All adverse impacts described in section one above would occur, except by fencing the reserve pit on three sides prior to drilling, and on the fourth side once the rig moves off, hazards posed by fluids to livestock and wildlife would be mitigated.

*T & E  
of Arch Clawson  
with comment  
from USFS*

Recommended Approval Conditions:

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

1. See attached Lease Stipulations.
2. See attached <sup>USFS</sup>~~BLM~~ Stipulations.
3. Fence reserve pit on three sides prior to drilling, and on the fourth side once the rig moves off.
4. Sample any water shows from the Navajo, the Wingate, and the White Rim Formations.

Controversial Issues and Conservation Division Response: None at present.

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

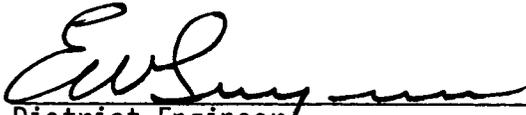
Determination

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

*T&E & Arch Clear forthcoming from USFS*

*Note 9/8/80*

*Rec'd 9/11/80*



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

9/17/80  
Date

FROM: DISTRICT GEOLOGIST, SALT LAKE CITY, UTAH

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

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. U-38347

OPERATOR: ARCO

WELL NO. 2

LOCATION: NE $\frac{1}{2}$  SE $\frac{1}{2}$  SW $\frac{1}{2}$  sec. 29, T. 32S, R. 3E, SLM  
Garfield County, Utah

1. Stratigraphy: Operator logs seem correct

Navajo	surface
Chinle	895'
Shinarump	1340'
Kaibab	2280'
Cocconino	3020'
TD	<u>3300'</u>

2. Fresh Water:

Navajo, Wingate (overlies Chinle), & White Rim (underlies Kaibab) may contain water that should be sampled if encountered!

3. Leasable Minerals:

4. Additional Logs Needed: Adequate

5. Potential Geologic Hazards: None expected

6. References and Remarks:

Signature: Gregory W Wood

Date: 7-29-80

*Arco Oil & Gas*  
*Well # 2*  
*29-325-3E*

Serial No.

U- 38347  
Oil and Gas Lease

**SURFACE OCCUPANCY STIPULATION**

1. Lessee agrees not to enter upon the lease area or disturb the surface for exploration or drilling purposes until either:

- (a) An inventory of archeological, paleontological, and historical sites is made by the surface management agency or its designated representative, or
- (b) Lessee has made or caused to be made an inventory of all archeological, paleontological, and historical sites in those areas of the lease subject to development, occupancy, or surface disturbance. The survey must be made by a qualified archeologist acceptable to the surface management agency and the results of this survey provided to the surface management agency. Costs of this survey will be borne by the lessee. After inventory by either lessee's archeologist or the surface management agency, reasonable conditions of use will be prepared to protect the sites or salvage objects of antiquity in accordance with the Antiquities Act of June 8, 1906 (34 Stat. 225; 16 USC 431), and the Historical Sites Act of August 21, 1935 (49 Stat. 666; 16 USC 461-467). Costs of salvage of artifacts will be borne by the lessee and all objects of antiquity salvaged will remain the property of the U. S. Government.

2. No occupancy of the surface in the following areas is authorized by this lease. The lessee may employ directional drilling to develop the oil and gas 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 surface management agency. The areas to be excluded from surface occupancy unless specifically approved in the operating plan are:

- (a) Within 500 feet on either side of the centerline of any and all roads and/or highways within the lease area.
- (b) Within 200 feet on either side of the centerline of any and all designated trails within the lease area.
- (c) Within 500 feet of the normal high waterline of any and all streams, lakes, ponds, and reservoir located within the lease area.
- (d) Within 400 feet of any and all springs within the lease area.
- (e) Within 400 feet of any improvements either owned, permitted, leased, or otherwise authorized by the surface management agency.

ATLANTIC REFINING COMPANY

**AUG 7 REC**

By: \_\_\_\_\_

Lessee Charles L. Brackridge  
Attorney-in-Fact

*Slenn*

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
Box 246  
Escalante, UT 84726

2820  
September 8, 1980



Mr. E.W. Guynn, District Engineer  
2000 Administration Building  
1745 West 1700 South  
Salt Lake City, UT 84138

Arco, Escalante #2

Dear Mr. Guynn:

Since this project is a reentry without any new disturbance there is not a problem with rare and endangered plants or animals nor cultural resources. Therefore, clearance for the above resources is given.

Sincerely,

for  
PHILIP H. BAYLES  
District Forest Ranger

cc: Glenn Doyle

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

**DUPLICATE**

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  Re-entry of Abandoned Well

2. NAME OF OPERATOR  
 ARCO Oil and Gas Company  
 Division of Atlantic Richfield Company

3. ADDRESS OF OPERATOR  
 P. O. Box 5540, Denver, Colorado 80217

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface 682' FSL, 2384' FWL, Sec. 29-T32S-R3E  
 At proposed prod. zone Approx the same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE  
 13 miles NW of Boulder Town, Utah

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

16. NO. OF ACRES IN LEASING  
 640

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 640

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

19. PROPOSED DEPTH  
 3300'

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 8371' DF

22. APPROX. DATE WORK WILL START\*  
 8/1/80, Upon Approval

5. LEASE DESIGNATION AND SERIAL NO.  
 U 38347

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 N/A

7. UNIT AGREEMENT NAME  
 N/A

8. FARM OR LEASE NAME  
 Escalante

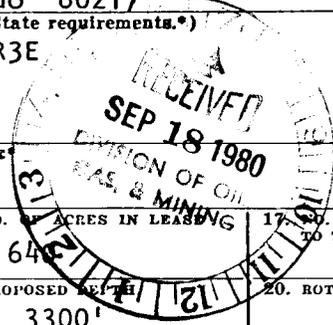
9. WELL NO.  
 2

10. FIELD AND POOL, OR WILDCAT  
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 Sec. 29-T32S-R3E

12. COUNTY OR PARISH  
 Garfield

13. STATE  
 Utah



23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
	13-3/8" *	48	1076	300 sx
	9-5/8" *	36	2607	920 sx

\* This casing is already in place.

OPERATIONS: Rig up to drill out cmt plug from 0 - 60', cmt and bridge plug from 2350' - 2500', cmt plug at 3070' - 3130'. Circulate and clean out existing wellbore to approximately 3300'. Spot 75 sx cmt plug from 3300' to 3250'. Run Caliper log from PBDT to Bottom of 9-5/8" csg to determine packer seat for DST of Coconino Formation. Conduct test of Coconino Formation from 2950' - 3100' to determine formation pressures.

EXHIBITS ATTACHED:

- A. Ten Point Compliance Program
- B. Blowout Preventer Diagram
- C. Multi-Point Requirements for A.P.D.
- D. Access Roads to location
- E. Radius Map of Area
- F. Wellsite Layout

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

24. SIGNED W. A. Walther, Jr. TITLE Operations Manager DATE July 10, 1980

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
 APPROVED BY W. P. Martin FOR E. W. GYNN DISTRICT ENGINEER DATE SEP 18 1980  
 CONDITIONS OF APPROVAL, IF ANY:

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

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

*State Oil & Gas*

EXHIBIT "A"

TEN-POINT COMPLIANCE PROGRAM  
OF NTL-6 APPROVAL OF OPERATIONS

Attached to Form 9-331C  
ARCO Oil & Gas Company  
Escalante Unit #2  
682' FSL & 2384' FWL  
Sec. 29-T32S-R3E  
Garfield County, Utah

1. The Geologic Surface Formation

The surface formation is the Navajo.

2. Estimated Tops of Important Geologic Markers

Chinle	894'
Shinarump	1337'
Kaibab	2277'
Coconino	3022'
Honaker Trail	4168'
Molas	4843'
Mississippian	4887'
Ouray	5932'

3. Estimated Depths of Anticipated Water, Oil, Gas or Minerals

Coconino	3022'	Gas
----------	-------	-----

4. Casing Program - In existence

<u>CASING</u>	<u>Csg. Size</u>	<u>Interval</u>	<u>Weight</u>	<u>Grade</u>	<u>Joint</u>	<u>New or Used</u>
Conductor pipe	13-3/8"	Set @ 1076'	48#	H-40	ST&C	New
Surface	9-5/8"	Set @ 2607'	36#	J-55	ST&C	New

Cement Program

Conductor Pipe: To surface, approximately 300 sacks  
Surface Casing: To surface, approximately 920 sacks

5. Operator's Minimum Specifications for Pressure Control

EXHIBIT "B" is a schematic diagram of the blowout preventer equipment. The BOP's will be hydraulically tested to half of working pressure after nipling up and after any use under pressure. Rams will be operationally checked each 24 hour period.

6. Type and Characteristics of the Proposed Circulating Muds

Mud system will be water and gel to drill cement plugs and circulate hole clean. Mud weight will be kept to a minimum to avoid loss circulation. Mud weighting material will be on location if pressures require its usage.

7. Auxiliary Equipment

A stabbing valve will be on the floor to be stabbed into the drill pipe if necessary.

8. Testing Program to be Followed

A DST will be conducted to determine pressures associated with the Coconino Formation.

9. Any Abnormal Pressures or Temperatures

No abnormal pressures or temperatures have been noted or reported in wells drilled in the area nor at the depths anticipated in this well.

10. Anticipated Starting Date and Duration of the Operations.

The anticipated starting date is set for July 15, 1980, or as soon as possible after examination and approval permitting requirements. Operations should be completed within three weeks.

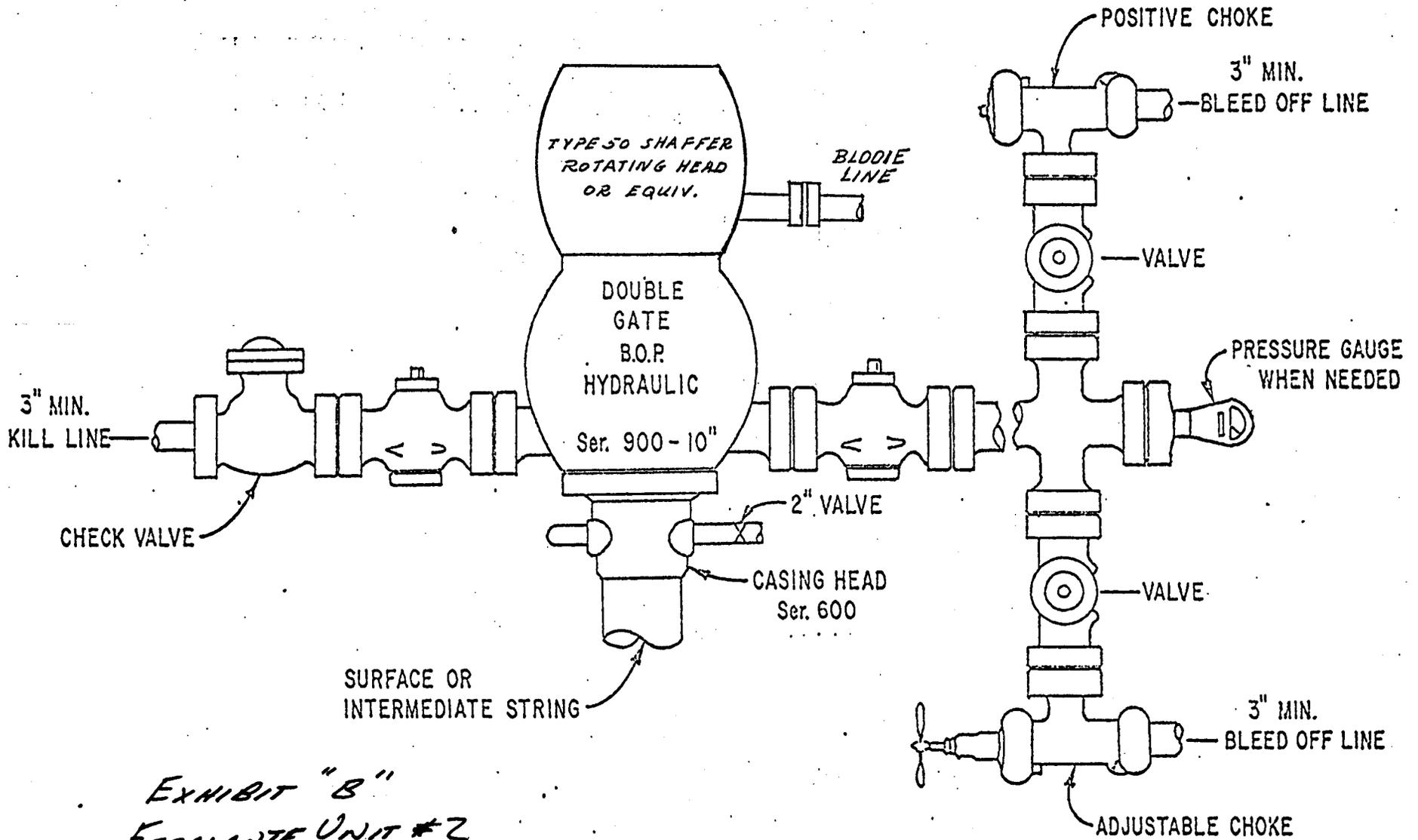


EXHIBIT "B"  
 ESCALANTE UNIT #2  
 ARCO OIL AND GAS  
 GARFIELD COUNTY, UTAH

EXHIBIT "C"

MULTI-POINT REQUIREMENTS TO ACCOMPANY A.P.D.

Attached to Form 9-331C  
ARCO Oil & Gas Company  
Escalante Unit #2  
682' FSL & 2384' FWL  
Sec. 29-T32S-R3E  
Garfield County, Utah

1. Existing Roads

- A. The distance from Boulder Town, Utah is approximately 13 miles. Proceed northwesterly along Forest Service Road Toward Hells Backbond for 12 miles. Take existing road into wellsite as shown on Exhibit "E".
- B. All roads to Existing location are color-coded on Exhibit "D".
- C. This is a re-entry of an existing well. All existing roads within a one-mile radius are shown on Exhibit "E".
- D. The existing roads need no improvement.

2. Planned Access Roads

Map showing all necessary access roads to be reconstructed is shown as Exhibit "E".

- A. Re-entry Operations
  - 1. The maximum width of the 1 mile of existing access required for re-entry is 18'.
  - 2. The grade is 8% or less.
  - 3. No turnouts are planned.
  - 4. Drainage patterns are already designed into this existing access road.
  - 5. Several culverts will be constructed as per Forest Service recommendations included in Environmental Analysis.
  - 6. No surfacing material will be required.
  - 7. No gates, fence cuts or cattle guards will be required.

B. Production

- 1. No production is anticipated.

3. Location of Existing Wells

For all existing wells within one-mile radius of existing wellbore, see Exhibit "E".

3. Location of Existing Wells (Continued)

- A. There are no water wells within a one-mile radius.
- B. There is an abandoned well, Escalante Unit No. 1, southwest of this location.
- C. There are no temporarily abandoned wells.
- D. There are no disposal wells.
- E. There are no wells presently being drilled.
- F. There are no producing wells within this one-mile radius.
- G. There are no shut-in wells.
- H. There are no injection wells.
- I. There are no monitoring or observation wells.

4. Location of Existing and/or Proposed Facilities

- A. Within a one-mile radius of location the following existing facilities are owned or operated by ARCO Oil and Gas or other Lessee/Operator:
  - 1. Tank Batteries - None.
  - 2. Production Facilities - None.
  - 3. Oil Gathering Lines - None.
  - 4. Gas Gathering Lines - None.
  - 5. Injection Lines - None.
  - 6. Disposal Lines - None.
- B. No production is anticipated.
- C. Rehabilitation will be made on all unused areas in accordance with Forest Service stipulations.

5. Location and Type of Water Supply

- A. The source of water will be Sand Creek, running along the existing access road as per Forest Service recommendation.
- B. A pump will be installed and the water will be piped to the location, as shown on Exhibit "E".
- C. No water well is to be drilled.

6. Construction Materials

- A. No construction materials are needed for the existing well-site location or access road.
- B. No construction materials will be taken off Federal land.
- C. All major access roads presently exist as shown on Exhibit "D".

7. Handling of Waste Materials and Disposal

- A. Drill cuttings will be buried after completion of operations.
- B. Drilling fluids will be handled in steel mud tanks during operations.
- C. Any fluids produced during testing will be collected in a test tank. Any spills of gas, salt water or other noxious fluids will be cleaned up and removed.
- D. Chemical toilet facilities will be provided for Human waste.
- E. After the rig moves out, all materials will be cleaned up and no adverse materials will be left on location.

8. Ancillary Facilities

No airstrip, camp or other facilities will be built during re-entry operations on this well.

9. Well Site Layout

- A. Exhibit "F" is a plan diagram of the proposed rig and equipment, trash/burn pit, pipe racks and mud tanks. No permanent living facilities are planned. There will be a trailer on site.
- B. There are no proposed production facilities.
- C. The mud pits will be of steel construction.
- D. Layout for Blooey Line is included if Air Drilling operations are required.

10. Plans for Restoration

- A. If well is abandoned, site will be restored to original condition as nearly as possible. Waste disposal and spoils materials will be buried or hauled away immediately to an approved sanitary land-fill after operations are completed.
- B. Revegetation will be accomplished by planting mixed grasses as per formula provided by the U.S. Forest Service.

11. Other Information

- A. The existing location has been partially restored with some native grasses and pine trees. Additional information concerning the immediate area is included in the Environmental Analysis done by U.S. Forest Service personnel in Escalante, Utah.

12. Lessee's or Operator's Representative:

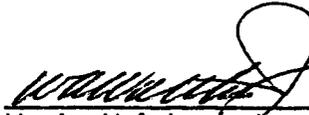
W. A. Walther, Jr.  
ARCO Oil and Gas Company  
Division of Atlantic Richfield  
717 17th Street, Suite 1201  
P.O. Box 5540  
Denver, Colorado 80217  
Phone: (303) 575-7031  
(303) 575-7153

C. E. Latchem  
ARCO Oil and Gas Company  
Division of Atlantic Richfield  
717 17th Street, Suite 1201  
P.O. Box 5540  
Denver, Colorado 80217  
Phone: (303) 575-7127  
(303) 757-1925

13. Certification

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

JUNE 20 1980  
Date

  
\_\_\_\_\_  
W. A. Walther, Jr.  
Operations Manager  
ARCO Oil and Gas Company  
Division of Atlantic Richfield Company

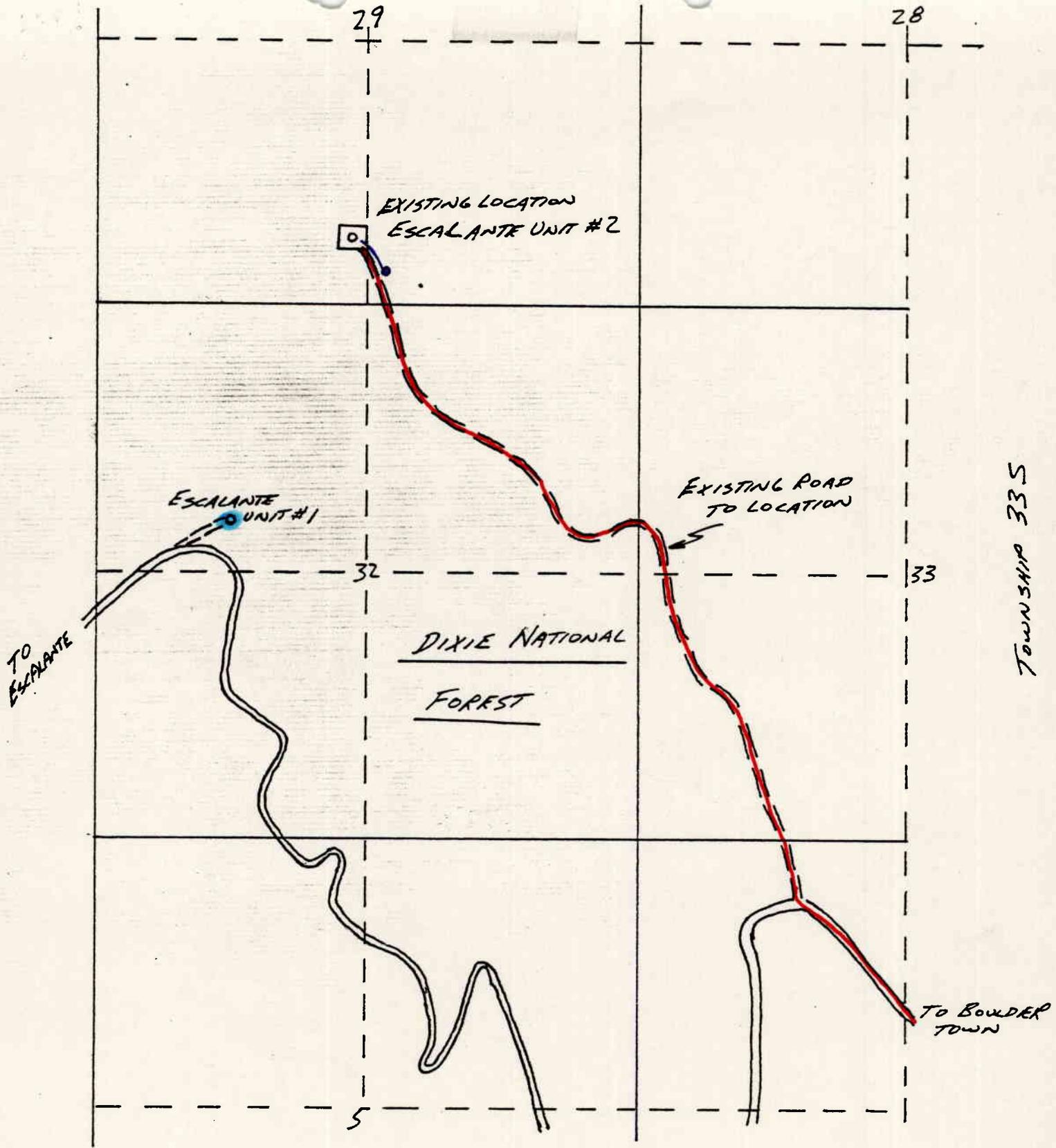


EXHIBIT "E"  
 ESCALANTE UNIT #2

GARFIELD COUNTY, UTAH

- EXISTING ACCESS ROAD
- WATER SUPPLY LINE
- ABANDONED WELLBORE

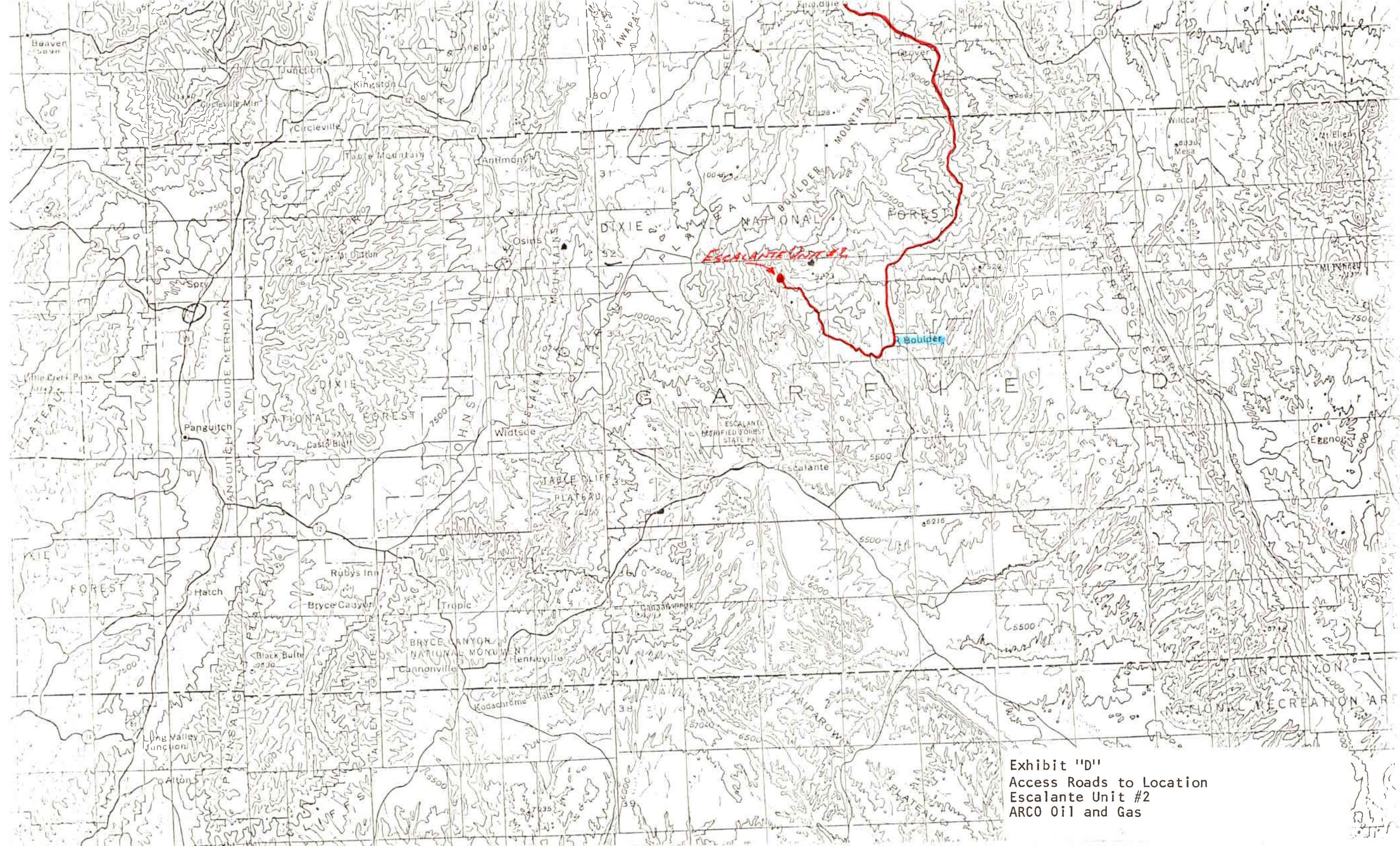


Exhibit "D"  
Access Roads to Location  
Escalante Unit #2  
ARCO Oil and Gas

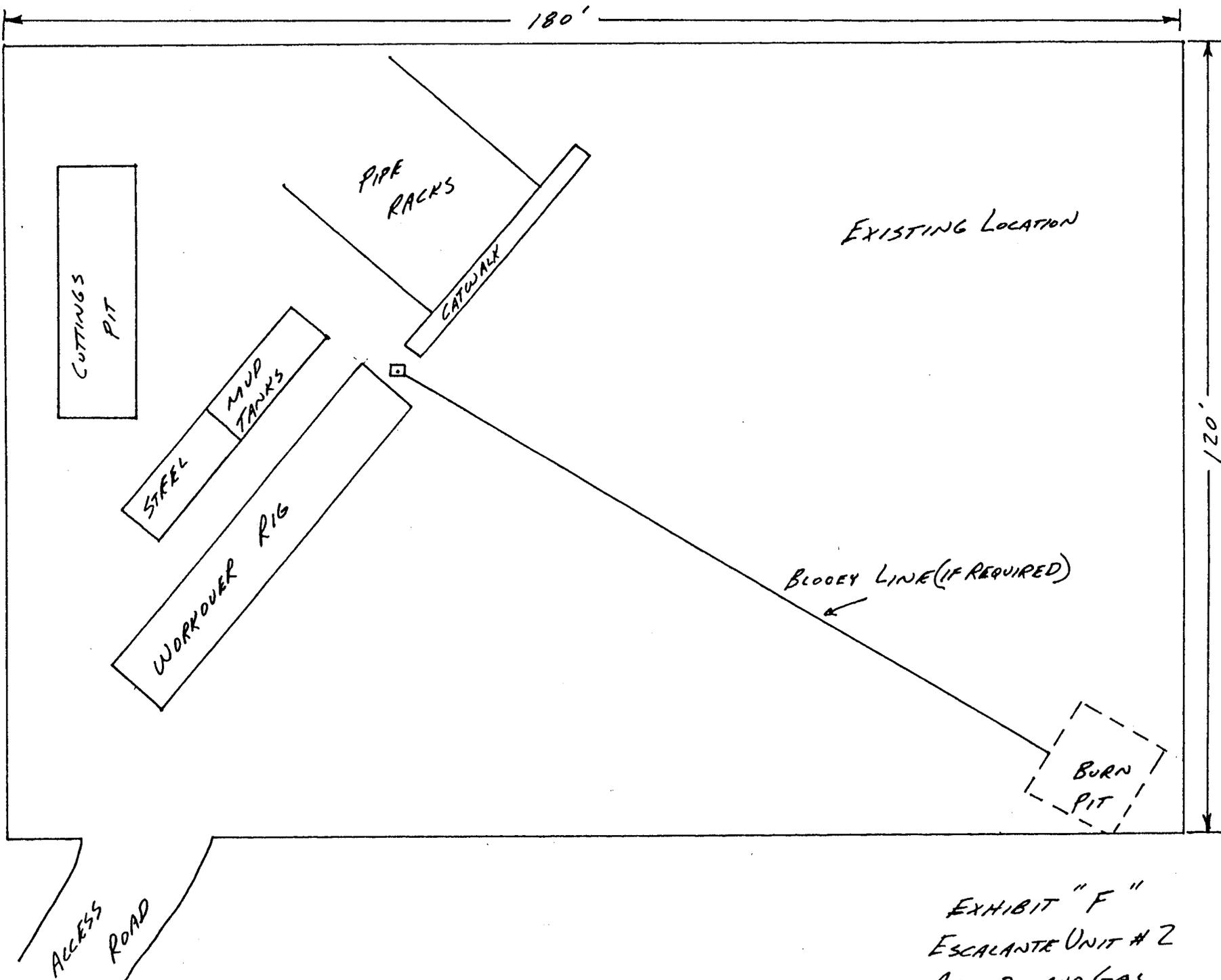


EXHIBIT "F"  
ESCALANTE UNIT # 2  
ARCO OIL AND GAS  
WELL SITE LAYOUT  
1" = 20'

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. oil well  gas well  other

2. NAME OF OPERATOR ARCO Oil and Gas Company  
Division of Atlantic Richfield Company

3. ADDRESS OF OPERATOR  
P.O. Box 5540, Denver, Colorado 80217

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 682' FSL & 2384' FWL  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH: Approx the same

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

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

5. LEASE  
U-38347

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
----

7. UNIT AGREEMENT NAME  
----

8. FARM OR LEASE NAME  
Escalante

9. WELL NO.  
2

10. FIELD OR WILDCAT NAME  
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
29-32S-3E

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

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)  
8371'

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

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

MI & RU. Tested BOP. Started drilling cement plug @ 6:00 pm 10-20-80. Drilled cement and retainer @ 2470'.

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

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

SIGNED WA Walther, Sr. TITLE Operations Manager DATE 11-3-80  
W. A. Walther, Sr.

(This space for Federal or State office use)

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

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

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1. oil well  gas well  other

2. NAME OF OPERATOR ARCO Oil and Gas Company  
Division of Atlantic Richfield Company

3. ADDRESS OF OPERATOR  
P.O. Box 5540, Denver, Colorado 80217

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 682' FSL & 2384' FWL  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH: Approx the same

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

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

5. LEASE  
U-38347

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
---

7. UNIT AGREEMENT NAME  
---

8. FARM OR LEASE NAME  
Escalante

9. WELL NO.  
1

10. FIELD OR WILDCAT NAME  
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
29-32S3E

12. COUNTY OR PARISH Garfield 13. STATE Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)  
8371' DF

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

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

RIH with stinger, stung into retainer @ 2550'. Pumped 46 bbls water. Mixed and pumped 100 sx Class "B" cement thru retainer. Displaced with 36 BW. Pulled 5' above retainer. Pumped 197 BW. Mixed and pumped 20 sx Class "B" cement. Displaced with 35.5 BW, no returns. Top of plug 2500'. POH. RIH and set cement retainer @ 2270'. Pulled out of retainer. Loaded casing with water. Stung back into retainer. Pumped 10 BW. Mixed and pumped 80 sx Class "B" cement thru retainer to perfs. Displaced with 32 BW. Had 400# surface pressure before plg out of retainer. Broke circl with water. Mixed and pumped 20 sx cement. Displaced with 31 BW. Top of plug @ 2210'. POH. LD all drill pipe. Ran 60' in hole. Spotted 20 sx Class "B" neat cement from 60' to surface. ND BOP stack & clean mud pits. Released rig @ 6:30 pm 10-29-80.

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

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

SIGNED W.A. Walther, Jr. TITLE Operations Manager DATE 11-3-80  
W. A. Walther, Jr.

(This space for Federal or State office use)

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

10/21/80 647 Day-1, Ftg-647. Work on mud pmp. Drlg w/wtr. Tstd BOP stack. Strtd drlg cmt plug @ 6 pm 10/20/80. Drld out firm cmt to 60'. Had cmt stringers to 164'. Ran BHA & 15 jts DP in hole. (Pmp motor died, cannot get strtd.)

10/22/80 2470 Day-2, Ftg-1823. Drlg - magn BP. Drlg w/wtr. Ran DP in hole to 1200'. Circ'd btms up. Ran DP in hole to 2323'. Drld cmt to 2470'. Strtd drlg on BP.

10/23/80 2470 Day-3, Ftg-0. INCOMPLETE REPORT. Fin drilling BP @ 2470' & lost comp returns. PI 300 BW W/O filling hole. Mixed mud @ LCM. While mixing LCM, SICP increased to 150#. Pmpd in 300 BM w/LCM w/no returns. CP still 150#. Prep to cont mix mud & LCM & check f/2nd cmt plug. No report since 10:30 pm 10/22.

10/24/80 3878 Day-4, Ftg-1390 Prep to POH & RU Lubricator. MW: 8.5+, Vis 45, WL NC Pmpd 250 bbls mud & LCM. No pmp pressure. Pressure on csg dropped f/150 to 40. Bled csg to 0 (no Blow) DP on vacuum. Opened rams - well dead. Strtd running DP in Hole @ 3376'. Took 10,000#. Well flwg sm amt of gas. PU Kelly. Shut well in. Start to mix mud. Mud mixing pump broke down. Wait on new Impeller. Mixed 350 bbls mud. Pmpd mud dwn hole. No sign of fluid in hole. Killed well. Rotated past bridge @ 3480' w/Kelly. Ran DP in hole to 3878'. No obstructions. Prep to POH.

10/25/80 3878 Day-5, Ftg-0. Prep to RIH w/press bomb. POH. Had to stop twice on TOH to fill w/wtr (400 bbls). ND Grant rotating head & NU lubricator. Well was on vac after getting out of hole. Waited on surf press indication before rng press bomb. At 6 am had 65# WHP.

10/26/80 3878 Day-6, Ftg-0. Rng BHP #2 (12 hr tst). RU Sch & lubricator. Ran Amerada press bomb to 3750# making gradient stops on way in & out of hole. Left bomb on btm 4 hrs. BHP was 304#, decr'g to 266# during the 4 hrs. FL @ 3200' on way in & @ 3400' on way out. BHT = 100°F. Surf WHP stabilized @ 120# by Teletellar recorder or 150# by ARCO gauges. Ran 7-3/4" guage ring & jk bskt to 2550'. Made up Amerada bomb f/survey #2. RIH w/bomb & set @ 3700' f/12 hr press meas.

10/27/80 2550 Day-7. PB - RU Sch, prep to perf. Fin BHP survey #2. Bombed on btm @ 3700' f/12 hrs. Found BHP 170# & stable. Surf press 121# & stable. No fld in hole. Well SI 33 hrs total. Ran Sch static temp logs. Logged f/surf to 3430'. Ran flwg temp log f/surf to 3430'. Logs indicated major gas entry f/3400'±. Final flw rate - 614 MCFD. On TOH w/temp tool, Schl stranded WL. Killed well w/250 BW. Brk off lubricator. Pld tool & 348' of WL out of hole by hand. PU Hallib EZ drl, FV retainer on WL. Set retainer @ 2550'KB. RD Sch & lubricator. PU Hallib DST tools & stood back in derrick. RU Sch & lubricator. Trip to run perf gun.

10/28/80 2550

Day-8. PB - RIH w/DP & cmt retainer stinger. Perf 2370-2420 w/2 JSPF. RD Sch & lubricator. NU Grant rotating head. Well had 120# surf press 3 hrs after perf'g. Pmpd 85 BW in to kill well. Ran Hallib cased hole DST tools. DST #1, perfs 2370-2420, pkr set @ 2320'. IHP 457#, IFP 132-250#, ISIP 409#, FFP 250-368#, FSIP 360#, FHP 327#. Rec'd 820' wtr; Sampler 2200 cc gas @ less than 10#; Resistivity of wtr sample 1.67 @ 35°F; Mud pit wtr sample 10.37 @ 37°F. LD tst tools. SIH w/Hallib cmt retainer stinger. Mud mixing pmp motor quit. Worked 3 hrs on mud pmp motor & pmp so lines wouldn't freeze. Strtd rng back in hole again. 5 min IF, strong blw thruout; 15 min ISI; 1 hr FF, strong blw, rapid decr to no blw - decr too fast to meas; 2 hr FSI.

10/29/80 2210

Day-9. PB - LD DP. RIH w/stinger f/Hallib EZ drl 9-5/8" cmt retainer. Stung into retainer @ 2550'KB. Pmpd 46 BW. Mixed & pmpd 100 sx Cl "B" cmt thru retainer. Displ'd to retainer w/36 BW, no surf press while pmpg. Pld 5' above retainer. Pmpd 197 BW, mixed & pmpd 20 sx Cl "B" cmt. Displ'd w/35.5 BW, no returns. Top of plug 2500'. POH. Made up 9-5/8" Hallib EZ drl cmt retainer on DP. RIH & set retainer @ 2270'. Pld out of retainer. Loaded csg w/wtr. Stung back into retainer. Pmpd 10 BW ahead. Mixed & pmpd 80 sx Cl "B" cmt thru retainer to perfs. Displ'd w/32 BW. Had 400# surf press before plg out of retainer. Brk circ w/wtr. Mixed & pmpd 20 sx cmt. Displ'd w/31 BW. Top of plug @ 2210'. POH. LD DP.

10/30/80 2210

Day-11. PB - FINAL REPORT-WELL P&A 10/29/80. RD & moving. LD all DP & DCs. Ran 60' in hole. Sptd 20 sx Cl "B" neat cmt F/60' to surf. ND BOP stack clean mud pits. Strtd RD. RR @ 6:30 pm 10/29/80.

**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.

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG \***

5. LEASE DESIGNATION AND SERIAL NO. U-38347

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
---

7. UNIT AGREEMENT NAME  
---

8. FARM OR LEASE NAME  
Escalante

9. WELL NO.  
2

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
29-32S-3E

12. COUNTY OR PARISH  
Garfield

13. STATE  
Utah

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. DESVR.  Other Re-entry of abandon well

2. NAME OF OPERATOR ARCO Oil and Gas Company  
Division of Atlantic Richfield Company

3. ADDRESS OF OPERATOR  
P.O. Box 5540, Denver, Colorado 80217

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 682' FSL & 2384' FWL SE SW  
At top prod. interval reported below Approx the same  
At total depth \_\_\_\_\_

14. PERMIT NO. 43-017-10904 DATE ISSUED 9-18-80  
Mr. Martens

15. DATE SPUDDED 10-20-80 16. DATE T.D. REACHED P & A 17. DATE COMPL. (Ready to prod.) 10-29-80 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 8363GL;8372DF;8376KB 19. ELEV. CASINGHEAD  
---

20. TOTAL DEPTH, MD & TVD 3878' 21. PLUG, BACK T.D., MD & TVD P & A Surface 22. IF MULTIPLE COMPL., HOW MANY\* 0 23. INTERVALS DRILLED BY ROTARY TOOLS 0-3878' CABLE TOOLS  
---

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
PLUG AND ABANDON

25. WAS DIRECTIONAL SURVEY MADE  
NO

26. TYPE ELECTRIC AND OTHER LOGS RUN  
Temperature Log

27. WAS WELL CORED  
NO

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48#	1076	ALREADY SET BEFORE 300 SX		
9-5/8"	36#	2607	ALREADY SET BEFORE 920 SX		

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
NONE				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
NONE		

31. PERFORATION RECORD (Interval, size and number)  
2370'-2420' 2 JSPF

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
NONE	

33.\* PRODUCTION

DATE FIRST PRODUCTION \_\_\_\_\_ PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) PLUG AND ABANDON WELL STATUS (Producing or shut-in) \_\_\_\_\_

DATE OF TEST	HOURS TESTED	CHOKO 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  
Daily Well History 2 of #26 above

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

SIGNED W. A. Walther, Jr. TITLE Operations Manager DATE 11-6-80

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

# INSTRUCTIONS

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

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

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

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

**Item 29:** "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool. **Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORP. INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL ON-P.N., FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES		38. GEOLOGIC MARKERS				
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TOP TRUE VERT. DEPTH
DST #1	2370'	-2420'	IHP 457#; IFF 132-250#; ISIP 409#; FFP 250-368#; FPIP 360#; FHP 327#. Recovered 820' water; Sampler 2200 cc gas @ less than 10# resistivity; Water sample 1.67 @ 35° F and mud pit water sample 10.37 @ 37° F	Chinle Shinarump Kaibab Coconino Honaker Trail Molas Mississippian Ouray	894' 1337' 2277' 3022' 4168' 4843' 4887' 5932'	
<p>PLUG AND ABANDON AS FOLLOWS:</p> <p>Pumped 100 sx Class "B" cement thru retainer @ 2550'</p> <p>Pumped 20 sx Class "B" @ 2500' (Top of plug)</p> <p>Pumped 80 sx Class "B" thru retainer @ 2270'</p> <p>Pumped 20 sx Class "B" @ 2210' (Top of plug)</p> <p>Spotted 20 sx Class "B" from 60' to surface</p>						

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. oil well  gas well  other

2. NAME OF OPERATOR ARCO Oil and Gas Company  
Division of Atlantic Richfield Company

3. ADDRESS OF OPERATOR  
P.O. Box 5540, Denver, Colorado 80217

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 682' FSL & 2384' FWL  
AT TOP PROD. INTERVAL: Approx the same  
AT TOTAL DEPTH:

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

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

5. LEASE U-38347
6. IF INDIAN, ALLOTTEE OR TRIBE NAME ---
7. UNIT AGREEMENT NAME ---
8. FARM OR LEASE NAME Escalante
9. WELL NO. 2
10. FIELD OR WILDCAT NAME Wildcat
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 29-32S-3E
12. COUNTY OR PARISH Garfield
13. STATE Utah
14. API NO.
15. ELEVATIONS (SHOW DF, KDB, AND WD) 8371' DF

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

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

1. Drilled out cement & retainer @ 2470' in 9-5/8" casing. Lost returns.
2. Pumped 1100 bbls mud in hole while running in hole to 3878' with no returns.
3. POH, pumping 400 bbls water in hole. No returns.
4. Ran BHP bomb to 3750'. Initial pressure 304 psi, 4 hr pressure 266 psi. Fluid level 3200' initially, 3400' on trip out of hole after 4 hrs. Surface pressure 120-150 psi.
5. Made second BHP bomb run to 3700'. BHP 170 psi and surface pressure 121 psi both remaining stable for 12 hrs. Total shut in time 33 hrs. Opened well and flowed while running temperature survey. Final CO<sub>2</sub> flow rate 614 MCFD. Gas entry point 3400'.

CONTINUED ON BACK

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

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

SIGNED W. A. Walther, Jr. TITLE Operations Manager DATE 11-3-80  
W. A. Walther, Jr.

(This space for Federal or State office use)

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

CONDITIONS OF APPROVAL IF ANY:

APPROVED BY THE DIVISION  
OF OIL, GAS, AND MINING

DATE: 11-7-90

BY: M. J. Minder

\*See Instructions on Reverse Side

REGISTERED

NOV 6 1980

DIVISION OF  
OIL, GAS & MINING

## Instructions

**General:** This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law 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.

**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 17:** Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

6. Ran HOWCO EZ drill FV retainer on WL and set in 9-5/8" casing @ 2550'

Will perf 2370'-2420' and DST. Will pump 100 sx thru retainer and set second retainer above perfs and squeeze 100 sx, leave 50' on top of retainer, fill with mud; surface plug 10 sx and reinstall marker (60' plug in surface).

PER REQUEST WITH R. HENDRICKS, U.S.G.S. 10-27-80 and MARK SMITH, ARCO OIL AND GAS COMPANY