

FILE NOTATIONS

Entered in NID File
Location Map Pinned
Card Indexed

..... ✓
..... ✓
..... ✓
..... ✓

Checked by Chief
Approval Letter
Disapproval Letter

PMB
.....
M. J. ...
.....

COMPLETION DATA:

Date Well Completed *11-17-68*
OW..... WW..... TA.....
GW..... OS..... PA. ✓

Location Inspected
Bond released
State or Fee Land

LOGS FILED

Driller's Log. *11-01-68*
Electric Logs (No.) *S*.....
E..... I..... Dual I Lat. ✓..... GR-N..... Micro.....
BHC Sonic *✓*..... Lat..... Mi-L..... Sonic.....
CBLog..... CCLog..... Others *Salinas Co. Neotoma Proximity Log*

12-17-91
for

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. 14-20-0603-436		
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribal		
2. NAME OF OPERATOR William Gruenerwald & Assoc., Inc			7. UNIT AGREEMENT NAME		
3. ADDRESS OF OPERATOR Box 909, Colorado Springs, Colorado 80901			8. FARM OR LEASE NAME Hovenweep		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 660' East Line, and 660' North Line At proposed prod. zone same (NE/4 NE/4)			9. WELL NO. 1		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 55 miles West of Cortez, Colorado			10. FIELD AND POOL, OR WILDCAT Wildcat NEW FIELD		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 660'		16. NO. OF ACRES IN LEASE 640		17. NO. OF ACRES ASSIGNED TO THIS WELL 80 acres	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. none		19. PROPOSED DEPTH 6100 ft		20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5228' grd est			22. APPROX. DATE WORK WILL START* Oct. 26, 1968		
23. PROPOSED CASING AND CEMENTING PROGRAM					

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 3/4"	10 3/4"	32.75	160'	115 SX
7 7/8"	5 1/2"	15.5	6000'	500SX

Propose to drill surface hole to a depth of approximate 160' at a good casing seat point, set surface casing at that point and cement.

Drill out from under surface with 7 7/8" bit to total depth of 6100' to penetrate the Desert Creek Formation, which ever is lesser. Test all shows, log, and run pipe if commercial shows of oil and/or gas are found.

Copies to: USGS-Farmington (3)
—State of Utah Oil and Gas Conservation Comm (1)
Navajo Tribe - Minerals Supervisor-Window Rock (1)

43-037-30054

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. Weldon C. Julander
SIGNED Weldon C. Julander TITLE Geologist for DATE Oct. 24, 1968
(This space for Federal or State office use) William Gruenerwald and Assoc., Inc.

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Need designation of Agent
*See Instructions On Reverse Side

WELDON G. JULANDER
508 SECURITY BUILDING
650 - 17TH STREET
DENVER, COLO. 80202

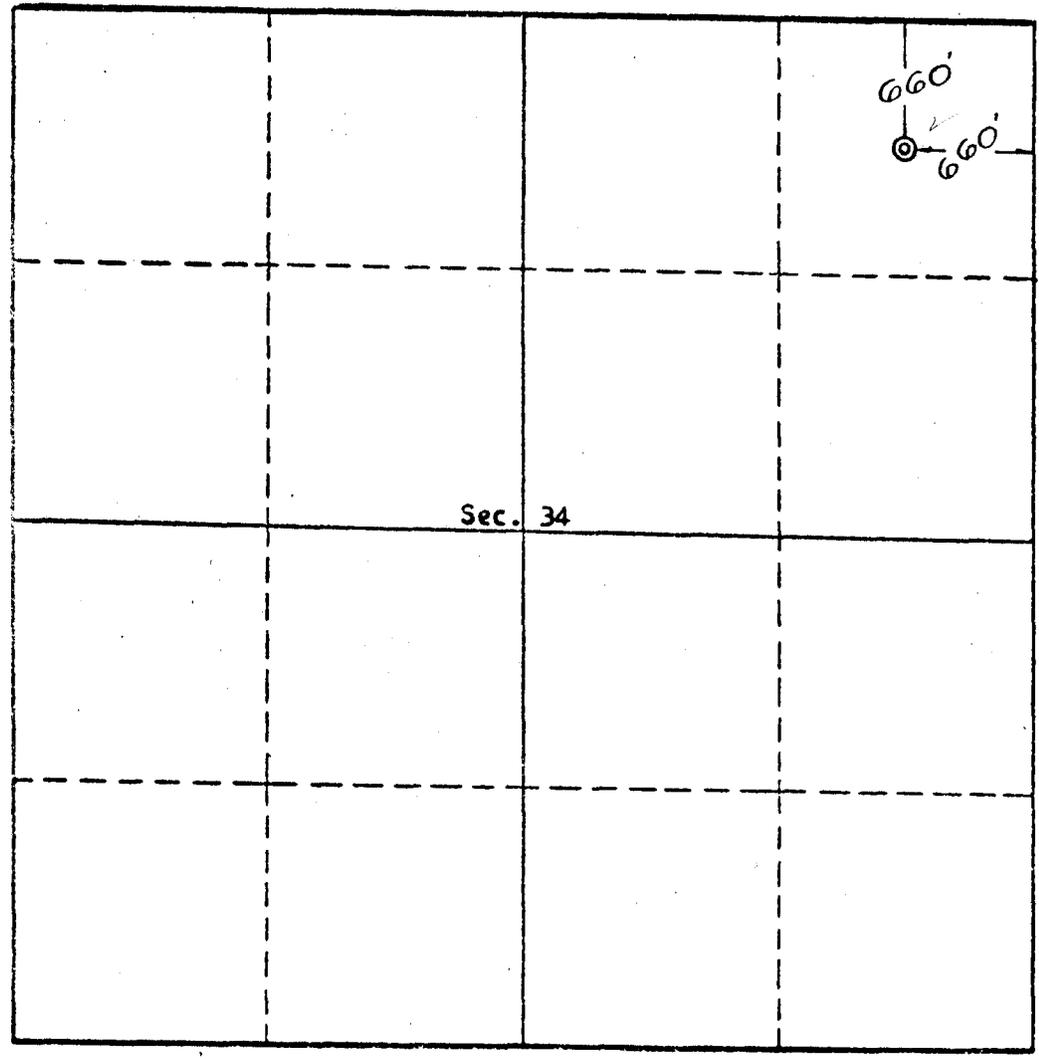
Company William Gruenerwald & Assoc, Inc

Well Name & No. Hovenweep No. 1

Location 660 feet from the North line and 660 feet from the East line.

Sec. 34, T. 39 S., R. 25 E., S. L. M., County San Juan, Utah

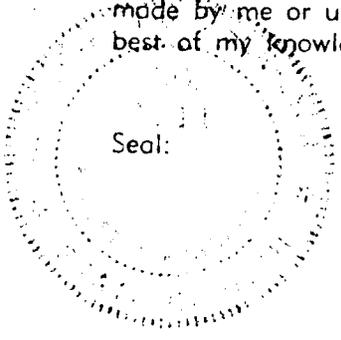
Ground Elevation 5228, Est.



Scale, 1 inch = 1,000 feet

Surveyed October 16, 19 68

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.



Ernest V. Echohawk

Ernest V. Echohawk
 Registered Land Surveyor
 Utah Registration No. 2611

DESIGNATION OF OPERATOR

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

DISTRICT LAND OFFICE: **Salt Lake City**
SERIAL NO.: **SL-067704-A**

and hereby designates

NAME: **William Greenwald & Associates, Inc.**
ADDRESS: **Box 909, Colorado Springs, Colo. 80901**

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

TR95 - 222E

Section 7: Lots 1 & 2

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

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

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

ALCO OIL AND GAS CORPORATION

Michael R. Simon

(Signature of lessee)
Michael R. Simon

11/13/68

(Date)

P.O. Box 52027

Lafayette, Louisiana 70501
(Address)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS CONSERVATION

"DESIGNATION OF AGENT"

The undersigned producer, operator, transporter, refiner, gasoline or initial purchaser who is conducting oil and/or gas operations in the State of Utah, does, pursuant to the Rules and Regulations, and Rules of Practice and Procedure of the Division of Oil and Gas Conservation of the State of Utah, hereby appoint, **Clyde L. Miller (Sec. of State)**, whose address is **State Capitol Bldg, Salt Lake City, Utah** his, her or its) designated agent to accept and to be served with notices from said Division, or from other persons authorized under the Oil and Gas Conservation Act of the State of Utah.

The undersigned further agrees to immediately report in writing, all changes of address of the agent, and any termination of the agent's authority, and in the latter case, the designation of a new agent or agents shall be immediately made. This designation of agent, however, shall remain in full force and effect until and unless a new designated agent is filed in accordance with said statute and said regulations.

Effective Date of Designation October 25, 1968

Company William Gruenerwald & Assoc., Inc Address Box 909, Colorado Springs, Colorado 80901

By *Weldon C. Julander* Title Geologist
(Signature)
Weldon C. Julander

NOTE: AGENT MUST BE A RESIDENT OF UTAH.

Telephone: Gruenerwald & Assoc, Inc: 303 635 2576

WELDON C. JULANDER
508 SECURITY BUILDING
650 - 17TH STREET
DENVER, COLO. 80202

WELDON C. JULANDER
508 SECURITY BUILDING
650 - 17TH STREET
DENVER, COLO. 80202

(Submit in Triplicate)

SUPERVISOR, OIL AND GAS OPERATIONS:

DESIGNATION OF OPERATOR

Indian Affairs

The undersigned is, on the records of the Bureau of ~~XXXXXX~~ holder of oil and gas lease

DISTRICT LAND OFFICE: **Window Rock, Arizona**
SERIAL NO.: **Cont. No. 14-20-0603-436**

and hereby designates

NAME: **William Gruenerwald**
ADDRESS: **P. O. Box 909, Colorado Springs, Colorado 80901**

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

Township 39 South - Range 25 East, S.L.M.
Section: 34: E/2 NE/4, E/2 NW/4, W/2 SE/4, W/2 SW/4

From Surface to Base of Desert Creek Formation

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

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

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

PAN AMERICAN PETROLEUM CORPORATION

By *T. S. Yancey* B78
(Signature of lessee)

T. S. Yancey, Its Attorney-in-Fact
Security Life Building, Denver, Colo.
(Address) **80202**

September 11, 1968
(Date)

October 29, 1968

William Gruenerwald & Associates, Inc.
Box 909
Colorado Springs, Colorado 80901

Re: Well No. Hovenweep #1 Navajo,
Sec. 34, T. 39 S., R. 25 E.,
San Juan County, Utah.

Gentlemen:

Insofar as this office is concerned, approval to drill the above mentioned well is hereby granted. However, this approval is conditional upon a Designation of Agent being filed with this office in accordance with Rule A-4, General Rules and Regulations and Rules of Practice and Procedure, State of Utah, Division of Oil and Gas Conservation.

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

PAUL W. BURCHELL, Chief Petroleum Engineer
HOME: 277-2890 - Salt Lake City, Utah
OFFICE: 328-5771

This approval terminates within 90 days if the well has not been spudded-in within said period.

Enclosed please find Form GGC-8-X, Report of Water Encountered During Drilling, which is to be completed whether or not water sands (aquifers) are encountered while drilling. Your cooperation with respect to completing this form will be greatly appreciated.

William Gruenerwald & Associates, Inc.

October 29, 1968

-2-

The API number assigned to this well is 43-037-30024 (see Bulletin D12 published by the American Petroleum Institute).

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

CLEON B. FEIGHT
DIRECTOR

CBF:sc

cc: U. S. Geological Survey
P. T. McGrath, District Engineer
Box 959
Farmington, New Mexico

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPlicate
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE-DESIGNATION AND SERIAL NO.

14-20-0603-436

6. IF INDIAN ALLOTTEE OR TRIBE NAME

Navajo Tribal

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Hovenweep

9. WELL NO.

1

10. FIELD AND POOL, OR WELDEAT

Wildcat

11. SEC., T., R., M. OR B&K. AND SURVEY OR AREA

34, T39S, R25E

12. COUNTY OR PARISH 13. STATE

San Juan Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL GAS WELL OTHER Dry hole

2. NAME OF OPERATOR
William Gruenerwald & Assoc., Inc.

3. ADDRESS OF OPERATOR
Box 909, Colorado Springs, Colorado 80901

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface 660' East Line and 660' North Line
(NE/4 NE/4)

14. PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, GR, etc.)
5228' grd.

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF
FRACTURE TREAT
SHOOT OR ACIDIZE
REPAIR WELL
(Other)

PULL OR ALTER CASING
MULTIPLE COMPLETE
ABANDON* XXXXXX
CHANGE PLANS

WATER SHUT-OFF
FRACTURE TREATMENT
SHOOTING OR ACIDIZING
(Other)

REPAIRING WELL
ALTERING CASING
ABANDONMENT*

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

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

Well was rotary drilled to a depth of 6160' with no shows of oil or gas, was Electric Logged with Sch TD of 6164'.

Following cement plugs were set:

TD of 6160' to 6000'
4900' to 4800'
3150' to 3000'
850' to 750'

Well Spud on: Oct. 30, 1968
Surface set on: Oct. 31, 1968
Reached TD on: Nov. 15, 1968
Eled Logs run on: Nov. 15 & 16, 1968

10 ex cent at surface with dry hole marker

Well was plugged by Halliburton on November 17, 1968, rig released at 6am Nov. 17, 1968

No drill stem testing or coring was performed.

Copies: USGS-Farmington (3)
State of Utah Oil & Gas Conser Comm (1)
Navajo Tribe -Hurlbut (1)

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

SIGNED Weldon C. Jendaby

TITLE Geologist

DATE 11-18-68

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE _____

FILE IN QUADRUPLICATE

STATE OF UTAH
 DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF OIL & GAS CONSERVATION
 1588 West North Temple

SALT LAKE CITY, UTAH 84111

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number No. 1 Hovenweep
 Operator William Gruenerwald & Assoc., Inc. Address Box 909 Colorado Springs, Colorado Phone 635-2576
 Contractor Loffland Company Address Farmington, N. Mex. Phone 325-5001
 Location NE 1/4 NE 1/4 Sec. 34 T. 39S R. 25 East San Juan County, Utah

Water Sands: Possible as determined from Elec Log furnished your office.
Well was rotary mud drilled.

<u>Depth</u>		<u>Volume</u>	<u>Quality</u>
<u>From</u>	<u>To</u>	<u>Flow Rate or Head</u>	<u>Fresh or Salty</u>
1. <u>550' to</u>	<u>575'</u>	<u>** unknown</u>	<u>unknown</u>
2. <u>2970' to</u>	<u>2982'</u>	<u>** unknown</u>	<u>unknown</u>
3. <u>3070' to</u>	<u>3090'</u>	<u>** unknown</u>	<u>unknown</u>
4. <u>3800' to</u>	<u>3840'</u>	<u>** unknown</u>	<u>unknown</u>
5. _____	_____	_____	_____

(Continued on reverse side if necessary)

Formation Tops: Chinle 1928'; Shinarump 2854'; Cutler 3092';
Penn-Hermosa 4856'; Ismay Limestone 5817'; Desert Creek Ls 6029'

Remarks: Total depth 6160' (Drlr), 6164' Sch.

- NOTE:
- (a) Upon diminishing supply forms, please inform this office,
 - (b) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure, (See back of form)
 - (c) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

**The above information is totally based on Electric Log Interpretation, as rate of flow from any zones is not known, nor salinity content.

WELDON C. JULANDER
 508 SECURITY BUILDING
 650 - 17TH STREET
 DENVER, COLO. 80202

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 *

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

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

2. NAME OF OPERATOR
William Gruenerwald & Assoc., Inc.

3. ADDRESS OF OPERATOR
Box 909, Colorado Springs, Colorado 80901

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 660'/EL and 660'/NL (NE/4 NE/4)

At top prod. interval reported below

At total depth

same

14. PERMIT NO. DATE ISSUED

5. LEASE DESIGNATION AND SERIAL NO.
14-20-0603-436

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo Tribal

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Hovenweep

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC. T. R. M., OR BLOCK AND SURVEY OR AREA
34, T39S, R25E

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

15. DATE SPUNDED Oct. 30, 68 16. DATE T.D. REACHED Nov. 15, 1968 17. DATE COMPL. (Ready to prod.) Nov. 17, 1968 18. ELEVATIONS (DF, REB, RT, GR, ETC.)* 5228' grd 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 6160' 21. PLUG, BACK T.D., MD & TVD none 22. IF MULTIPLE COMPL., HOW MANY* none 23. INTERVALS DRILLED BY → ROTARY TOOLS 0-6160' CABLE TOOLS none

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

25. WAS DIRECTIONAL SURVEY MADE

26. TYPE ELECTRIC AND OTHER LOGS RUN
Sch-IES, Borehole Comp Sonic, Sidewall Neutron Porosity

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
<u>10 3/4"</u>	<u>32.75</u>	<u>167'</u>	<u>13 3/4"</u>	<u>175sx</u>	<u>none</u>

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
	<u>none</u>					<u>none</u>	

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
	<u>none</u>	

31. PERFORATION RECORD (Interval, size and number)

none

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
<u>none</u>	<u>none</u>

33.* PRODUCTION

DATE FIRST PRODUCTION none PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)

WELL STATUS (Producing or shut-in)

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

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

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

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

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

SIGNED Weldon C. Julander TITLE Geologist DATE 11-19-68

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

INSTRUCTIONS

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

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

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

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

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

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS	
				NAME	MEAS. DEPTH
Morrison porous sd	550'	575'	Sand (zone of porosity)	Dakota	At surface
Moenkopi porous sd	2970'	2982'	Sand (zone of porosity)	Navajo	1250'
Moenkopi porous sd	3070'	3090'	Sand (zone of porosity)	Chinle	1928'
Cutler porous sd	3800'	3840'	Sand (zone of Porosity)	Shinarump	2854'
Desert Cr. porous Dol	6100'	6104'	Dolomite, no shows of oil or gas.	Moenkopi	2970'
			No drill stem tests were run on above porous zones	Permian-Cutler	3092'
			No cores.	Penn-Hermosa	4856'
			Total depth 6160' in Akah.	Ismay Ls	5817'
				Desert Creek	6029'
				Akah	6138'
				TD	6160'

Nov 20 1968