

FILE NOTATIONS

Entered in NID File ✓
Location Map Pinned ✓
Card Indexed ✓

Checked by Chief *G.M.O.*
Approval Letter
Disapproval Letter

COMPLETION DATA:

Date Well Completed
OW..... WW..... TA.....
GW..... OS..... PA..... ✓

Location Inspected
Bond released
State or Fee Land

LOGS FILED

Driller's Log... *Yes*
Electric Logs (No.) *4*
E..... I..... Dual I Lat..... GR-N..... Micro.....
BHC Sonic GR..... Lat..... Mi-L..... Sonic.....
CBLog..... CCLog..... Others.....

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

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK
 b. TYPE OF WELL
 OIL WELL GAS WELL OTHER Wildcat SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 SKYLINE OIL COMPANY

3. ADDRESS OF OPERATOR
 418 Atlas Building, Salt Lake City, Utah 84101

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
 At surface 2152'/SL, 2065'/EL Sec. 36, T. 35 S., R. 9 E., S.L.M.
 At proposed prod. zone Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 N.W. WASE

10. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 2065'
 16. NO. OF ACRES IN LEASE 640
 17. NO. OF ACRES ASSIGNED TO THIS WELL 80

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. N.A.
 19. PROPOSED DEPTH 4200'
 20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) GR 5094'
 PERMIAN
 22. APPROX. DATE WORK WILL START* June 21, 1971

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9-5/8"	32#	200'	Cement to Surface
8-3/4"			to T.D.	

We propose to:

1. Drill 12 1/2" hole to approx. 200' and set 9-5/8" casing cemented to surface.
2. Drill 8-3/4" hole out from under surface to T.D. 4200'.
3. Double ram, 10", 900 series hydraulic blowout preventer will be used in all drilling below surface casing.
4. Should production be indicated, we will set a 4 1/2" string of production casing adequately cemented.

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 [Signature] TITLE Vice President DATE June 12, 1971

(This space for Federal or State office use)

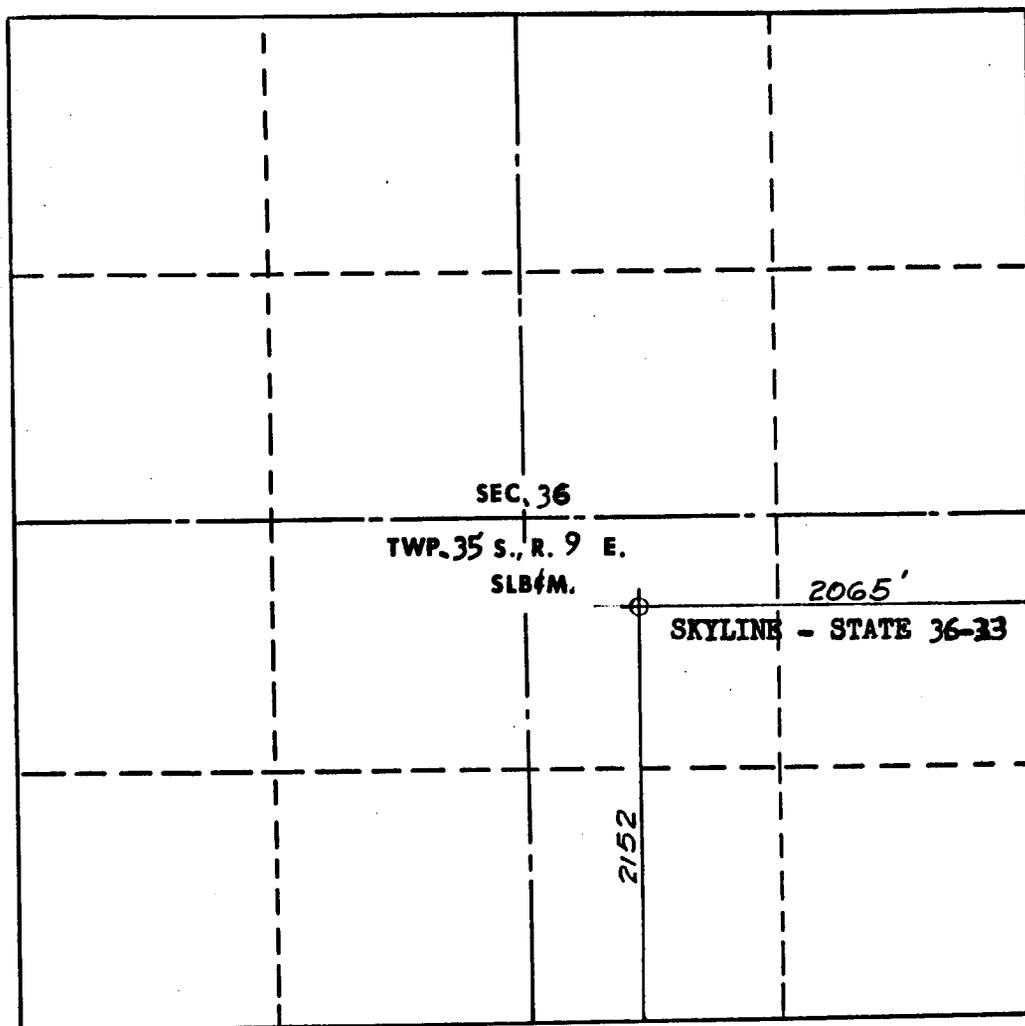
PERMIT NO. 43-017-38835 APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:



SCALE: 1" = 1000'



SURVEYORS CERTIFICATE

I, GEORGE H. NEWELL A REGISTERED LAND SURVEYOR AS PRESCRIBED BY THE LAWS OF THE STATE OF UTAH, HOLDING LICENSE NO. 1770, CERTIFY THAT THIS PLAT OF:

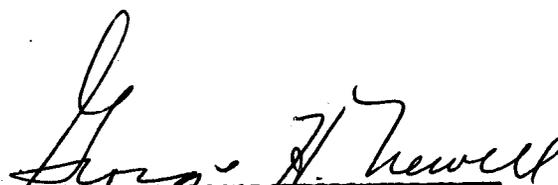
SKYLINE - STATE 36-33

AND MORE SPECIFICALLY DESCRIBED AS FOLLOWS:

2152 feet from the South Line and 2065 feet from the East line of Section 36, T. 35 S., R. 9 E., SLB&M. Ground Elevation 5094'.

IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE June 12, 1971


GEORGE H. NEWELL

SKYLINE OIL COMPANY

418 ATLAS BUILDING

SALT LAKE CITY, UTAH 84101

TELEPHONE (801) 521-3500

REED G. SPJUT
VICE PRESIDENT

June 15, 1971

State of Utah
Division of Oil & Gas Conservation
1588 West North Temple
Salt Lake City, Utah

Gentlemen:

Skyline Oil Company is the owner of Utah State Oil and Gas Lease ML-24020 and is planning to drill a well on the leased premises to test for oil and gas at a location in the NW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 36, T. 35 S., R. 9 E., S.L.M., Garfield County, State of Utah, 2152 feet from the south line and 2065 feet from the east line of Section 36.

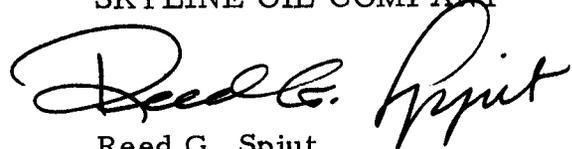
Rule C-3 of the Utah State Oil & Gas Rules and Regulations requires that no well be drilled less than 500' from the boundary of any legal subdivision without an exception being granted. The proposed location is approximately 488 feet from the north boundary line of the NW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 36, but is necessary because of the accessibility problems due to topography. Therefore, Skyline Oil Company, lessee, requests a topographical exception be granted to said Rule C-3 to allow the well to be drilled in the above-described location.

We hereby stipulate that Skyline Oil Company is the oil and gas Lessee of record of all the lands within a 660 feet radius of the above-described well location, all such lands being within Utah State Oil and Gas Lease ML-24020.

Thank you for your consideration of our request.

Very truly yours,

SKYLINE OIL COMPANY



Reed G. Spjut
Vice President

SKYLINE OIL COMPANY

418 ATLAS BUILDING

SALT LAKE CITY, UTAH 84101

TELEPHONE (801) 521-3500

REED G. SPJUT
VICE PRESIDENT

June 16, 1971

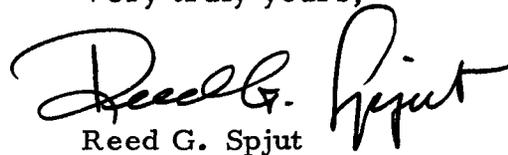
State of Utah
Division of Oil and Gas Conservation
1588 West North Temple
Salt Lake City, Utah

Gentlemen:

We are enclosing herewith two copies each of Application for Permit to Drill our Muley Creek State 36-33 well located in the NWSE of Sec. 36, T. 35 S., R. 9 E., Garfield County, Utah, and Request for an Exception to be granted to Rule C-3 to allow us to drill the well at a location closer than 500 feet to the boundary line of a quarter-quarter section.

We would appreciate your approval of our Application as soon as possible, as we would like to commence drilling operations the first part of next week.

Very truly yours,



Reed G. Spjut

Enclosures

June 17, 1971

Skyline Oil Company
418 Atlas Building
Salt Lake City, Utah 84101

Re: Muley Creek State 36-33
Sec. 36, T. 35 S, R. 9 E,
Garfield County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above mentioned well on said unorthodox location is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure.

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
OFFICE: 328-5771

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

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling.

The API number assigned to this well is 43-017-30035.

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

CLEON B. FEIGHT
DIRECTOR

CBF:sd
cc: Division of State Lands

PS *[Signature]*

PLUGGING PROGRAMS

NAME OF COMPANY: Skyline Oil Co.

WELL NAME: Muley Creek State 36-33

Sec. 33 Township 35S Range 9E County Garfield

Verbal Approval Was Given to Plug the Above Mentioned Well in the Following Manner:

TD - 4142' 9 7/8" sugar casing at 223'
110 sacks - 2% Calcium chloride,
Circulated to sugar
8 3/4" set at 4022'

Cased from 4022' - 4142' - 7 1/16"

Sample Tops:

Plugs:

Nowgo - 1587' - (water)	30 sacks at 3975'
Chinle - 3035'	40 " " 3650'
Shinarump - 3699'	40 " " 1550'
Muskopi - 3845'	30 " " bottom of
Farbat - 4015' (saturation)	sugar casing
White Rim - 4049' (8% water wet)	marker installed

(Program given from Reed Spjut)

Date Approved: 9-6-71 Signed: Scheer

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.

5. LEASE DESIGNATION AND SERIAL NO.

ME-24020

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

9. WELL NO.

Mule Creek State #36-33

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

Sec. 36, T. 35 S., R. 9 E., SLM

12. COUNTY OR PARISH

Garfield

13. STATE

Utah

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

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

2. NAME OF OPERATOR

Skyline Oil Company

3. ADDRESS OF OPERATOR

418 Atlas Building, Salt Lake City, Utah 84101

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

At surface 2152'/SL, 2065'/EL Sec. 36, T. 35 S., R. 9 E., SLM

At top prod. interval reported below

At total depth

14. PERMIT NO. DATE ISSUED

12. COUNTY OR PARISH

Garfield

13. STATE

Utah

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

6-22-71

7-5-71

5104 K. B.

20. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS

4142'

0' - 4142'

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 25. WAS DIRECTIONAL SURVEY MADE

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

IES, FDC/GR

Yes

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#	223 KB	12 1/4"	110 sx-circ to surf.	None
5-1/2"	15 1/2#	4142 KB	8-3/4"	110 sx Class A 18% NaCl, 1/2% CFR-2	None

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number) 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

4034'-4046'/17 shots

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4034-4046	1000 gals. 28% HCl

33.* PRODUCTION

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

DATE OF TEST HOURS TESTED CHOKE SIZE PROD'N. FOR TEST PERIOD OIL—BBL. GAS—MCF. WATER—BBL. 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

IES, FDC/GR Logs, Well report

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

SIGNED

[Signature]

TITLE Vice President

DATE 8/16/71

FORM OGC-8-X

FILE IN QUADRUPLICATE

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS CONSERVATION
1588 West North Temple
Salt Lake City, Utah 84116

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number Muley Creek State #36-33
Operator Skyline Oil Company Address 418 Atlas Building Phone 521-3500
Contractor Pease Drilling Company Address Grand Junction, Colo. Phone 303-242-6912
Location NW ¼ SE ¼ Sec. 36 T. 35 N R. 9 E Garfield County, Utah
S #

Water Sands:

<u>Depth</u>		<u>Volume</u>	<u>Quality</u>
From	To	Flow Rate or Head	Fresh or Salty
1. 1573	(+ 3531 S. L.)	2546' Top of fluid	Fresh
2.		Column approx.	
3.		+ 4250' S. L.	
4.	Encountered while drilling with air		
5.			

(Continue on reverse side if necessary)

Formation Tops: Navajo: 1573'

Remarks:

- 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.

4

SKYLINE OIL COMPANY

ME

418 ATLAS BUILDING
SALT LAKE CITY, UTAH 84101
TELEPHONE (801) 521-3500

REED G. SPJUT
VICE PRESIDENT

August 23, 1971

State of Utah
Division of Oil & Gas Conservation
1588 West North Temple
Salt Lake City, Utah

Re Muley Creek State #36-33 Well,
NW $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 36, T. 35 S., R. 9 E., S. L. M.,
Garfield County, Utah. Lease No. ML-24020

Gentlemen:

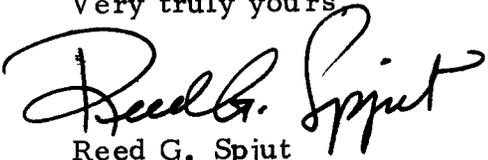
Enclosed herewith are two copies each of the following materials relating to the subject well:

1. Well Completion Report and Log.
2. Summary of Drilling History of the Well, including Sample Log.
3. A Report of the Work Performed During the Completion Attempt.
4. Induction Electric Log.
5. Compensated Formation Density Log.

Also enclosed, in quadruplicate, is Form OGC-8-X, Report of Water Encountered During Drilling.

This well was plugged and abandoned on August 5, 1971, and the location has been cleaned up ready for inspection. We still have 4,000 feet of 2-7/8" tubing on location which we will remove within the next month.

Very truly yours


Reed G. Spjut
Vice President

Enclosures

DATA SHEET

WELL: Skyline Oil Company
Muley Creek State # 36-33

LOCATION: 2152' FSL, 2065' FEL, Section 36-35S-9E
Garfield County, Utah

AREA: Wildcat

ELEVATION: 5094' Ground Level, 5104' Kelly Bushing

CONTRACTORS: Willard Pease Drilling Company
Pusher - Jim Lang
Drillers - Harvey, Allred, Stocker

EQUIPMENT: Mayhew 5000 as per Bid Sheet and Drilling Order

SPUDDED: June 22, 1971, 10 A.M.

CASING: 9-5/8" set @ 223' K.B. with 110 sacks

DRILLING FLUID: Air - Willard Pease; Mud - Magcobar, Neal Davis, Engineer

TESTING: None

CORING: Christensen Diamond Products Company
Cut and recovered 120'

LOGGING: Schlumberger Induction Electrical Log
Schlumberger FDC with GR-Caliper

SAMPLES: American Stratigraphic Company, Denver, Colorado

SUPERVISION: Grant I. Gaeth

TOTAL DEPTH: 4142' Driller, 4146' Schlumberger

COMPLETED: July 6, 1971, 1.P.M.

STATUS: Dry Hole

WELL HISTORY

Date	Depth	Remarks
6/21/71	0	Commenced rigging up
6/22/71	0	Spud Rat Hole @ 10 a.m. Spud 12-1/4 surface hole @ 2 p.m.
6/23/71	228	Set 8 joints (240.72') of 9-5/8" 8 round 32 # casing with Texas pattern Guide Shoe and two centralizers, @ 223.16' with 110 sacks cement (2% CaCl).
6/24/71	404	Drilling 8-3/4" hole; drilled plug @ 1 a.m.
6/25/71	1429	Drilling with air mist
6/26/71	2030	Drilling with air, soap and water
6/27/71	2628	Drilling with air, soap and water
6/28/71	2917	Drilling with mud; stuck 26 stands off bottom @ 11 a.m.
6/29/71	3010	Worked struck drill pipe free with driving tool; drilling with mud
6/30/71	3259	Drilling
7/1/71	3335	Tripping for bit # 13
7/2/71	3670	Drilling
7/3/71	3855	Drilling
7/4/71	4022	Tripping for locked bit; 6 hrs. to condition hole; 2 hrs. waiting on core engineer. Coring @ 10 p.m.
7/5/71	4082	Tripping to cut core #2
7/6/71	4142	Finished logging @ 12:30 a.m. Well plugged and abandoned @ 1 p.m., after setting the following plugs with State approval:

Plugged Interval	# sks. of cement
3888-3975	30
3550-3650	35
1448-1551	30
110-200	30
Top of 9-5/8" surface casing with dry hole marker	10

FORMATION TOPS

	Sample Top	E-Log Top	Sea Level Datum
JURASSIC			
Entrada	591	584	+4520
Carmel	1355	1387	+3717
Navajo	1588	1573	+3531
TRIASSIC			
Kayenta	2540	2546	+2558
Wingate	2630	2630	+2474
Chinle	3035	3036	+2068
Shinarump	3699	3700	+1404
Moenkopi	3847	3847	+1257
PERMIAN			
Kaibab	4021	4027	+1077
White Rim	4051	4056	+1048

SAMPLE DESCRIPTION

223-450 Sandstone, white to lt. grey, f-crs sub a. to sub r. frosted qtz. grs. with interbeds of maroon brown claystone; both units contain concretionary limestone nodules.

450' Schlum. JURASSIC SUMMERVILLE

450-584 Claystone, maroon brown grading to siltstone, orange brown, sdy. calc. with thin stringers of gypsum.

584' Schlum. JURASSIC ENTRADA

584-1387 Sandstone, light orange brown, v. f. ang. qtz. grs. silty, calc.

1387' Schlum. JURASSIC CARMEL

1387-1573 Claystone, medium red brown, calc. aren. thin streaks of Anhy. grades to siltstone, orange brown, interbedded with light orange brown v. f., ang. sandstone; all lithologies grade to dark red brown orange silty limestone below 1520.

1573' Schlum. JURASSIC-TRIASSIC NAVAJO

1573-2546 Sandstone, light orange tan, v. f.-f. sub r. frosted qtz. grs. Sample consists of loose grs. with strong flow of water.

2546' Schlum. TRIASSIC KAYENTA

2546-2630 Sandstone, aa, silty, grades to thin beds of light orange brown sandy siltstone; trace well rounded, med. qtz. grs.; thin lam. of dark maroon brown claystone.

2630' Schlum. TRIASSIC WINGATE

2630-3036 Sandstone, light orange tan, v. f.-f. sub ang. frosted qtz. grs. arg. in part, predominantly loose grs.

3036' Schlum. TRIASSIC CHINLE

3036-3080 Limestone, grey, Dol., v. arg. abd. silt sized qtz. grs. with interbedded arg. sandstone, aa.

3080-3330 Claystone, orange brown, aren. to v. aren. calc. with thin orange brown, calc. siltstone and limestone stringers, aa.

3330-3520 Claystone, maroon brown to lavender brown, aren. calc. with thin stringers calc. green grey siltstone; thin beds of light brown to grey cherty limestone.

3520-3580 Claystone, orange maroon with limestone incls., calc. grades to and intb. with green grey aren. calc, claystone, trace v. dirty maroon cong. sandstone, pry. calc. arg. @ 3570'.

- 3580-3670 Claystone, medium grey green carb. aren. in part; streaks calc. mottled to lavender maroon and intb. with orange maroon claystone, aa. Trace thin streaks dirty tan f-crs gr. cherty sandstone, v. calc. abd. feldspar, carb.
- 3670-3699 Claystone, medium to dark grey green, v. carb. aa, with streaks of cherty and cong. dirty tan to grey green sandstone, aa.

3699' Schlum. TRIASSIC SHINARUMP

- 3699-3743 Sandstone, white to lt. grey, f-m sub a. to sub r. frosted qtz. grs., calc. silc. poor-fair inter-gran. por. No flour. No cut, no vis. stand., tr. black carb. material
- 3743-3760 Claystone, green grey, aa, intb. with sandstone, sli, cong. aa.
- 3760-3847 Sandstone and conglomerate, white to lt. grey, f-crs sub a. to sub r. frosted qtz. grs. abd. loose crs. and larger qtz. and cht. pebble frags. in samples. Sli, calc. in f. sand; chert is grey tan and buff. Some intb. grey green carb. claystone, aa. No show. Prob. fair porosity in crs. material - lost approx. 200 barrels of mud.

3847' Schlum. TRIASSIC MOENKOPI

- 3847-3970 Claystone, chocolate brown, fissil in part, sli, Dol. to Dol. sli, aren. Trace micr. mica.
- 3970-3975 Sandstone, orange brown to buff tan, v. f. sub a. grs. calc. mica, v. aren. arg. dirty. N.V.P., N.S.
- 3975-4021 Claystone, aa, with trace buff sandy Dol. in lower 5'.

CORE #1 4022-4082 [Cut and recovered 60']

4027' Schlum. PERMIAN KAIBAB

- 4022-4028 Dol. lt. green grey to tan, v. f.-f xln. glauc. in part. Tr. qtz. grs. with silc. cmt. spty. tan (dead) oil stn. No natural flour. N.C.F. V. p. inter-xln. por. v. lt. yellow cut flour. @ 4023'; g. cut flour. below 4025'. Oil stained generally over 50% of core below 4023'; more v. f. med. qtz. grs. (approx. 25% qtz. grs.) g. oil odor thru out.
- 4028-4034 Dol. brown, v. f.-f grs. and xln., spty. lt. grey green (no oil stain); tr. glauc where no oil stain, m. to hvy. dark brown vis. oil without natural flour., tr. natural flour. in thin streaks, excellent cut flour, oil liberated by Hcl acid. Dol. after foram and moluskan frags. fair inter-gran. and small vug. por.; abd. m-crs. r. qtz. grs. as incls. Excellent inter-gran. por. @ 4032'; less por. and stylo. @ 4033'.
- 4034-4036 Dol. oil stain as above. Intb. with lt. grey sdy. Dol. No stain. No show in 1/8 to 1/4" lam. beds.
- 4036-4049 Dol. brown, v. f.-f. gran. with lt. grey green sdy. Dol. aa. V. skel. with abd. gastropods below 4039', excellent small vug. and inter-xln. por.; v. hvy. brown oil saturation. Strong odor and excellent cut flour.; tr. natural flour. with isolated pockets

of lt. tan stn. and gold cut flour. @ 4041'. Tr. vert. fract., leached ool-foram por. with pyr. @ 4043'; vugs. to 3/8", tr. natural flour. @ 4044'; (sat. streaked @ 4047'; 20-40% v. f.-f. qtz. grs.); stylo. @ 4048' probable hiatal surface.

4055' Schlum. PERMIAN WHITE RIM

- 4049-4051 Sandstone, white to brown, (spty. dead oil stn.) poor-fair natural flour. over stained areas. V. f-crs. sub a.-well r. frosted qtz. grs., poorly sorted, well cmt. in part with calc. and sil. cmt.; lam. zones of oil saturation up to 1/2".
- 4051-4058 Sandstone, dark brown, f.-m. sub r. qtz. grs. hvy. res. 0. stn., no natural flour., excellent streaming cut flour., tr. move-able oil. Abd. hvy. tarry res. coating grs., sil. Dol.; g. inter-grn. por.; increasing calc. cmt., with tr. natural flour. @ 4057'.
- 4064-4065 Sandstone, lt. grey-white, f. sub a. to sub r. qtz. grs. Dol. poor-fair inter-gran. por. N.S.
- 4065-4066 Sandstone, white with spty. brown, aa.
- 4066-4067 Sandstone, dark brown, aa.
- 4067-4081 Sandstone, white to lt. grey, f-crs. sub a. to well r. frosted qtz. grs., poorly sorted, Dol. Tr. sil. cmt. poor inter-gran. por. No show. Strong sulphur odor. wet. Grades to f. as 4064' @ 4068'; two sands intb. below 4069' appears hd. and tight with low perm. to 4079', better por. with tr. oil stn. 4079'-81'.
- 4081-4082 Sandstone, white to brown, lam. intbs. f. sub a. qtz. grs.; well sort., less cmt. and better por. in oil stn. zones, g. cut flour.

CORE #2 4082-4142 [Cut and recovered 60']

- 4082-4092 Sandstone, white to light grey, f. sub r. frosted qtz. grs. No visible cmt. Excellent inter-gran. por. Thin zones up to 2" of hvy. oil saturation with tr. cut flour. to 4084'; zone appears water wet.
- 4092-4142 Sandstone, grey, v. f.-f. sub a to sub r. frosted qtz. grs. moderately cross bedded v. Dol., fair inter-gran. por. No show.

BIT RECORD

Run	Size	Make	Type	Depth Out	Footage	Hours
1	12-1/4	Reed	YS1J	228	228	7-1/2
2	8-3/4	Reed	YHG	1042	814	14-1/2
3	8-3/4	Reed	YHG	1429	387	8-1/2
4	8-3/4	Reed	YHWG	1697	268	9-1/2
5	8-3/4	Reed	YHG	2294	597	11-1/2
6	8-3/4	Reed	YHG	2636	342	13-1/4
7	8-3/4	Reed	YHG	2963	327	11-1/2
8	8-3/4	Reed	YS1GL	3080	117	5-1/4
9	8-3/4	Reed	YT3	3188	108	6
10	8-3/4	Reed	YT3	3277	89	9-1/4
11	8-3/4	Reed	YT3	3335	58	7-3/4
12	8-3/4	Reed	YT1A	3468	133	8-1/2
13	8-3/4	Reed	YT1A	3648	180	10-3/4
14	8-3/4	Reed	YT1AJ	3750	102	11
15	8-3/4	Reed	YT1AJ	3871	121	12-1/4
16	8-3/4	Reed	YT3AJ	4022	151	13 (locked)
17	7-13/16	Christensen	C.H.	4142	120	11-1/2

RE-ENTRY REPORT
JULY - AUGUST, 1971
SKYLINE OIL CO. - MULEY CREEK STATE 36-33
NW SE SEC. 36, T35S-R9E, GARFIELD COUNTY, UTAH
ELE 5094 GL (ALL TOPS ADJUSTED TO SCHLUMBERGER LOG)

Conditions of re-entry July 24, 1971 -

Well P & Aed 7-6-71. 9 5/8" surface casing to 223'.
8 3/4" open hole to 4027'; 7 13/16" open (core) hole to
T.D. (4146). Cement plugs set @ 110' - 200', 1448 - 1551,
3550 - 3650 and 3888' - 3975'. Dry hole marker not yet
cemented. Drilling rig still on location, mast down
Recent flash floods.

Reason for re-entry - Core analysis results received subsequent
to plugging revealed encouraging zones in the Kaibab and White
Rim where acceptable levels of porosity, permeability, oil
saturation, etc. correlated with retort results indicating
movable oil of above 30 API gravity.

The economic advantage of conclusive determination while the
rig etc. still on location is apparent.

Intent and Plan of Operation - To rig up, drill out plugs, ream
the cored interval 4027' to 4076' (i.e. to calculated oil
water contact), clean out remaining hole to T.D. (4146'), run
and cement 5 1/2" casing, perforate and test the Kaibab and
White Rim (?) objectives.

Daily Drilling Report - 24 July 1971 pusher and two crews on
location 1:00 p.m. Road being repaired to location. Raised
mast, removed BOP, found rat hole, mouse hole filled in.
Water supply dam washed out. Crews worked until 7:00 p.m.

25 July 1971 repaired water hole. Hauled water. Drilled out
rat hole and mouse hole and replaced sox. Welded drilling
nipple to come off 10" - 900 series flange on bradenhead.
Entered main hole with Reed YH-WG-R 8 3/4" bit (#1 new).
Drilled out top plug to 250'. Drilling mud and water on
location. Alerted Halliburton in Farmington. Applied to
Park Service (M. S. Nicholson) for water from lake or fire
hydrant.



26 July 1971 drilled second plug to 1550'. "Mud" severely contaminated. Conditioned hole @ 2000' prep to drill third plug. Mud clabbered. Found shoulder 3695' (Shinarump ss). Had to ream jt. at a time. 131 jts. (4192'). 5 1/2" 15.50# used casing on location. Thrds good, no protectors.

27 July 1971 finished last plug and reamed hole to T.D. (4142' Driller). Conditioned mud and hole 2 hours (9.5# 40 vis). Made short trip to check 3695' shoulder; still sticking. Made 2nd short trip. Came out laying down. Started running 5 1/2" casing 9:30 p.m. Larkin guide shoe, insert float at first collar (26'), 4 centralizers and 2 scratchers through pay section (4024 - 60'). Used weld lock on 2 bottom joints.

28 July 1971 ran 130 jts. 5 1/2" 15 1/2# used casing, landed at 4142' K.B. (4132 G.L.). T.D. inside casing calculated @ 4117' K.B. From bottom up, 26.43', 31.32', 31.73', 30.63'. Cemented with 500 gal. mud flush, 110 sacks class A bulk cement. Mixed with 18% NaCl, 1/4% (26#) CFR-2. Good returns throughout; wash out lines, plug down @ 3:45 a.m. Insert valve operated O.K.

Casing went to bottom O.K.; worked pipe to stay loose; stopped to attach cementing head; tried to move again; stuck four feet off bottom; gained good circulation but still stuck; circ. and tried to work pipe 15 minutes; started cementing. Stretch data - casing wt. 60,000# before stuck. Pulled up to indicated 100,000# 4 inches stretch. Casing apparently stuck between 1000' - 1500' either in key seat (from drilling history at 1200') or differentially stuck. Circulation was excellent and cement job not in question.

Calculated cement top 3700'.

Pulled 50000# (2") on casing, hammered in slips, released wt. (16' csg.) above bradenhead. Released rig 4:00 a.m. Called welder to cut stub. Rig crew began tearing down. W.O.C.

29 July through 1 August 1971 - Wait on completion rig.

2 August 1971 1100' (approx.) 2 7/8" EUE 6.5# J-55 used tubing arrived location noon. R & R Well Service rig, flat tank, Dowell (acid) Schlumberger on location 4:00 p.m. Ran correlation log. Found T.D. inside casing @ 4105'.



3 August 1971 135 good jts. 2 7/8" EUE 6.5# tubing on location with help of Caterpillar tractor. Ran tubing to swab. Swabbed (4:00 p.m. to 7:00 p.m.) hole dry to 4056'. Pulled tubing.

4 August 1971 Dumped 1000 gal. mixed 28% HCl acid, 8 gal. inhibitor, 10 gal. W-10 anti sludge, 30# L-41 iron sequestering agent in open casing. Ran Schlumberger wireline 3 3/8" carrier gun. Perfed 4034, 34 1/2, 35 4037, 37 1/2, 38, 38 1/2, 39, 42, 42 1/2, 43, 43 1/2, 44, 44 1/2, 45, 45 1/2, 46 (17 hyperjet shots) in acid. Ran Baker Mod. AD-1 tension packer (size 45-B) on tubing to 2700'. Set packer with 5000#. Displaced casing with water below packer. Broke down formation with 750 p.s.i. wellhead pressure (2470 p.s.i. B.H.P.). Pumped 2 1/2 bbl./min. rate throughout with 350 p.s.i. total 54 bbls. Flowed back 2 bbls. Dropped packer to 3950' to swab through tubing. Swabbed entire load plus 75 bbls. water - slightly brackish, sulfurous with slight oil skim. Hole yields 50 bbls./hr. water. Non commercial.

5 August 1971 After 16 hour wait, swabbed additional 100 bbls., no change. Laid down tubing. Obtained appropriate approval to abandon. Set Baker Mod. P-1 bridge plug (Size 2AA) in 5 1/2" casing above perfs @ 3970' at 2:00 p.m. Released rig. Left casing full of water ready to set dry hole marker.

Note - left on location

135 jts. 2 7/8" 6.5# J-55 used tubing
(protectors on 101 jts.)

2 jts. crooked tubing as above

1 jt. 30.20' 5 1/2" casing

1 stub 16.5' 5 1/2" casing

Submitted by,



G. S. Campbell, Geological Engineer

GSC:gb

CRAHAM S. CAMPBELL



MEMBER

CERTIFIED PROFESSIONAL GEOLOGIST 832