15-151-20698

36-27s-13w

JANUARY 25, 1980

GEOLOGICAL WELL REPORT
William Gruenerwald & Associates, Inc.
#2 Gibbons-Hess, NW SE SE
Section 36-T27S-R13W
Rolingson Pool, Pratt County, Kansas
Contractor: DaMac Drilling, Inc.
Spud: January 14, 1980
13 3/8" Surface Casing @ 206'
5 1/2" Production Casing @ 4433'
Rotary Completion: January 23, 1980
Total Depth 4434' Rotary, 4436' Elec. Log

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

Gentlemen:

Listed below are the pertinent geological tops, an evaluation of the porosities encountered below the top of the Lansing, and a lithologic description of a diamond core cut in the Simpson section.

I witnessed the drilling of this well from 4200 to 4434TD. Samples were examined from 4000-4434TD. The hole was logged electrically before being cased, electric log data included herein. A Viola drill stem test was taken 4218-65

I witnessed landing of the 5-1/2" production casing @ 4433.

Enclosed herewith is a copy of the plotted drilling time from 3650-4434 TD which also includes lithology, porous zone, tops, and other pertinent data.

ELECTRIC LOG TOPS

ELEVATION	1851 KB	
HEEBNER	3530	(-1679)
BROWN LIME	3708	(-1857)
LANSING	3728	(-1877)
BASE KANSAS CITY	4076	(-2225)
MISSISSIPPIAN CHERT	4128	(-2277)
VIOLA CHERT	4217	(-2366)

SIMPSON SHALE	4265	(-2414)
SIMPSON DOLOMITE	4271	(-2420)

4271-91 Dolomite, tan to gray, medium to coarsely crystalline, Sandy. Some good cavernous porosity -- good oil stain and free oil, good odor.

SIMPSON SAND	4307	(-2456)

DIAMOND CORE #1 4285-4317

Recovered 32'/32'

4285-90 Sandstone, medium fine, clean, friable, good porosity and saturation, bleeding live oil. Bottom two feet appears black and gilsonitic but oil saturated.

4290-92 Dolomite, tan, medium crystalline, hard, dense except for coarse solution cavities, gilsonite lined carrying live free oil. Also vertical fracturing.

4292-93 Dolomite, tan, coarsely crystalline, minor porosity and staining.

4293-94 Hard, finely crystalline gray dolomite.

4294-96 Dense, buff, lithographic limestone, vertically fractured.

4296-97 Dolomite hard, light greenish, tight, included rounded sand grains.

4297-98 Dolomite, tan, finely sucrosic, oil stained, with thin green shale partings.

4298-4300 Shale, compact, hard, green grading into dark gray.

4300-01 Hard, gray, quartzitic sandstone, thin dark shale seams.

4301-03 Shale, green, compact, included thin sand lenses, grading into gray sandy shale.

4303-04 Conglomeratic zone, greenish shale including black pebbles, pyrite and fine white sandstone

4304-14 Sandstone, white, medium fine, compact, completely oil saturated and bleeding live oil, some vertical fracturing. Becoming more friable and porous 4308-14.

4314-15 Sandstone, fine, compact, oil stained but much darker stain than above.

4315-17 Sandstone, very fine, compact, hard but clean and oil stained - watery appearance on fresh fracture.

BASE OF SAND	4324	(-2473)
ARBUCKLE	4390	(-2539)

4390-4434 Dolomite, tan to buff, medium to coarsely crystalline, scattered porous, oolicastic dolomite. Zones of good porosity, no visible oil staining, no odor. Samples carry light mineral fluorescence under black light.

TOTAL DEPTH	4434	(Rotary)
	4436	(E. Log)

DRILL STEM TEST #1 4218-65

30" - 30" - 30" - 30"

Very weak blow, died 5 mins. into second open period.

Recovered: 100 feet of mud, few specks of black oil, no show of water.

IFP	59#	FFP	61#
ISIP	118#/30 mins.	FSIP	108#/30 mins.

Conclusions and Recommendations

This is an inside location within the Simpson Sand producing area. This well is surrounded by producing Simpson sand wells and compares favorably structurally and lithologically with the surrounding producers. The sand reservoir is well represented. This hole was drilled 44 feet into the Arbuckle and was cased to bottom. Although no "shows" were observed in the Arbuckle, the casing is set to facilitate testing the upper 30 feet of the Arbuckle if such is desired.

A drill stem test of the Viola Chert provied negative as to oil or gas.

Simpson sand and dolomite perforations are recommended.

Yours very truly,

T. G. Wright

TGW:wlf

BIT RECORD

	(rerun)	206 - 1053
HUGHES	OSC3AJ	1053 - 2114
HUGHES	J22	2114 - 3320
SECURITY	S86F	3320 - 4285
REED	FP53	4285 - 4434 TD

DRILLING PROGRESS

1-14-80	Spud	
1-15	592	
1-16	2045	
1-17	2850	
1-18	3510	
1-19	4070	
1-20	4270	
1-21	4305	
1-22	4400	
1-23	4434 TD	5½" @ 4433'

Log Analysis

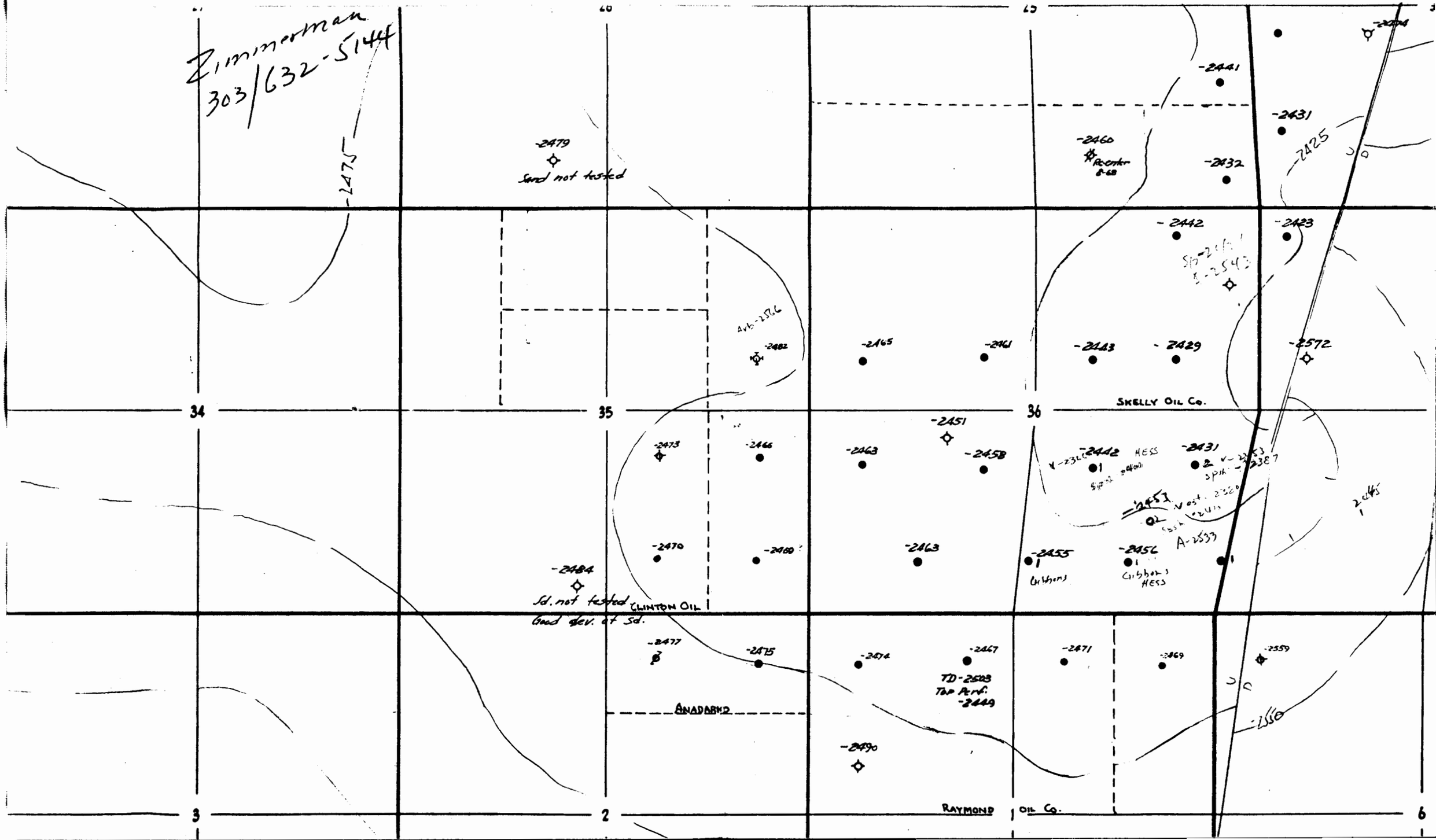
Schlumberger

COMPANY: Gruenwald & Assoc., Inc.
WELL: Gibbons Hess #1-2
FIELD: N.A.
COUNTY: Pratt
STATE: Kansas

DEPTH	R_t	ϕ_D	ϕ_N	R_w	ρ_{ma}	BVW	% POROSITY X-Plot	% WATER S_w	REMARKS * Gas Corrected
3732-34	58	17	13	.04	2.71	.026	15/*16.5	16	Poss. Gas Effect
3734-36	50	14	12	"	"	.028	13/*15	19	Poss. Gas Effect
3736-40	45	-3	4	"	"	.010	1	100	Tight
3770-72	20	8	8	"	"	.045	8	56	Poss. Hydro.
3772-74	21	6	8	"	"	.044	7	62	" "
3774-76	27	6	6	"	"	.038	6	64	" "
4168-72	45	7.5	7	"	"	.030	7.25	41	Poss. Hydro
4172-76	29	6	11	"	"	.037	8.5	44	" "
4176-80	30	9	10	"	"	.037	9.5	38	" "
4180-82	30	7	10	"	"	.037	8.5	43	" "
4182-84	30	5	14	"	"	.037	9.5	38	" "
4184-86	27	8	15	"	"	.038	11.5	33	" "
4273-75	17	10	15	.045	"	.051	12.5	41	Poss. Hydro.
4275-78	18	13	13	"	"	.050	13	38	" "
4278-84	21	12.5	15.5	"	"	.047	14	34	" "
4284-86	20	17	15	"	"	.047	16	30	" "
4286-91	20	13	18	"	"	.047	15.5	31	" "
4307-10	40	11	5	"	"	.034	8/*10.5	32	Poss. Hydro. Gas Effect
4310-17	39	12	7	"	"	.034	9.5/*11	31	" " Gas Effect
4317-20	30	10	6.5	"	"	.039	8.25/*10.25	38	" Gas Effect
4320-24	26	9	4	"	"	.042	6.5/*9	46	" Gas Effect
4324-28	14	7	7	"	"	.057	7	81	Wet

All interpretations are opinions based on inferences from electrical and other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

DATE: 1-22-80
LOCATION: Wichita
ENGINEER: Smith


Zimmerman
303/632-5144
-2475
-2479
Sand not tested
-2441
-2431
-2460
Recenter
8-68
-2432
-2425
-2442
-2423
SP-2469'
S-2543
-2572
-2465
-2461
-2443
-2429
SKELLY OIL Co.
-2482
-2473
-2466
-2451
-2463
-2458
-2442
HESS
-2431
-2470
-2469
-2463
-2455
-2456
Gibbons
Gibbons
HESS
A-2533
-2484
Sd. not tested
Good dev. of Sd.
CLINTON OIL
-2477
-2475
-2474
-2467
-2471
-2469
-2559
TD-2503
Top Perf.
-2449
ANADARKO
-2490
-2550
RAYMOND OIL Co.
35
36
34
2
1
3
6