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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

APL (1236123)

Company BUTTES GAS & OIL COMPANY Formation "D" SAND Page _____ of _____
Well NO. 1 NICKLAS Cores DIAMOND File RP-2-3371
Field WILDCAT Drilling Fluid WEM Date Report 5/11/65
County WELD State COLORADO Elevation 4405 KB Analysts PARKER
Location NW SE 13-9N-56W Remarks CONVENTIONAL ANALYSIS

CORE ANALYSIS RESULTS

(Figures in parentheses refer to footnote remarks)

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCS		POROSITY PERCENT	RESIDUAL SATURATION		PROBABLE PRODUCTION	REMARKS
		HORIZONTAL	VERTICAL		OIL % VOLUME % PORE	TOTAL WATER % PORE		
1	5562-63	266	262	18.1	10.5	38.7	ss,fg	Core No. 1 5562-79' (bbl jammed)
2	63-64	325	314	18.4	12.0	37.5	ss,fg	
3	64-65	78	70	19.8	3.0	65.2	ss,fg	
4	65-66	201	188	18.7	0.0	80.3	ss,fg	
5	66-67	129	122	17.4	0.0	87.9	ss,fg	
6	67-68	223	207	17.9	0.0	85.5	ss,fg	
7	68-69	231	213	16.2	0.0	84.0	ss,fg	
8	69-70	186	172	17.0	0.0	85.3	ss,fg	
9	70-71	100	89	16.8	0.0	84.5	ss,fg	
10	71-72	61	52	16.3	0.0	82.9	ss,fg	
11	72-73	225	203	18.6	0.0	88.8	ss,fg	
12	73-74	100	93	18.1	0.0	83.5	ss,fg	
13	5578-79	63	57	10.8	12.0	27.8	ss,fg	Core No. 2 5579-5610 ← base of sands @ 5590.7
14	79-80	76	64	10.5	12.4	26.7	ss,fg	
15	5581-82	2.5	1.9	8.7	0.0	63.2	ss,vfg, sh lam	
16	82-83	6.8	5.0	7.1	0.0	59.2	ss,vfg, sh lam	
17	83-84	61	55	14.2	10.6	44.3	ss,fg	
18	84-85	225	207	12.3	13.8	30.1	ss,fg	
19	5587-88	1.0	0.6	7.9	0.0	57.0	ss,fg	
20	5589	22	19	11.1	0.0	79.3	ss,fg	
21	90	36	31	12.8	0.0	76.6	ss,fg	

note:

To correspond with log adjust down hole 2'.



00264991

NOTE:

(*) REFER TO ATTACHED LETTER.
(1) INCOMPLETE CORE RECOVERY—INTERPRETATION RESERVED.

(2) OFF LOCATION ANALYSES—NO INTERPRETATION OF RESULTS.

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc., and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

Core
Lab.

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Core
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BEST IMAGE
AVAILABLE

T* 7795

R* 1050

← F A →

← E B →

D

C →

Company Operating Well:

Buttes Gas & Oil Co.

Address:

See Slip

Contractor and Rig No.:

Murfin Drilg. Co. Rig # 6

Well Name and No.:

J. Nicklas # 1

County State

Well Colorado

Sec. Twp. Rng.

13 9 N 56 W

Ticket DST No. Tester

7795 1 Rittenhouse

Date of Test and Formation Tested

5-10-65 "D" Sand

	Field Pressure	Corrected Pressure	RESULTS		No. Final Copies
Initial Hydrostatic: A	3002	3000	Total Depth	5579	Interval Tested 5561 to 5564 *
Final Hydrostatic: F	2993	2974	Tool open	7 Min.	before Initial Shut-in 30 Min.
Initial Flow: C	218	224	Tool open	60 Min.	Total Final Shut-in 33 Min.
Final Flow: D	851	862	Tool open @	6:00 p. M.	Mud Wt. 9.8 Viscosity 51
Initial Shut-in: B	1387	1404	Did well flow Gas?	Yes	Oil? No Water? No
Final Shut-in: E	1387	1397	Was blow measured?	No	
Pressure below bottom packer bled to:	1730	1700	Top Choke	1"	Bottom Choke 9/16"
			Recorder No.	1050	Run at 5570 I.D. & Length of D.C.s 2 3/4"
			Was this a straddle test?	Yes	Witnessed by: Roland Young
			Recovery in Pipe	1735' total fluid.	20' H/ oil cut mud - 260' oil and 1455' gassy water.

REMARKS:

Tool opened with strong blow then had slight decrease after 40 minutes.
 Gas to surface in 9 minutes after opening tool for test. BHT 138°.

Test Conclusive.

* Note: to correspond with log adjust down hole 2',
 (test interval 5563-66')



**BEST IMAGE
AVAILABLE**

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS
WATER ANALYSIS

File RP-2 WA 181

Company BUTTES GAS & OIL CO. Well Name NICKLAS NO. 1 Sample No. 1
Formation "D" SAND Depth 5561-5564 Sampled From DST NO. 1
Location NW SE 13-9N-56W Field WILDCAT County WELD State COLORADO
Date Sampled 5/11/65 Date Analyzed 5/12/65 Engineer PARKER

Total Dissolved Solids 9,343 mg/L calc.

Sp Gr 1.006 @ 63 °F

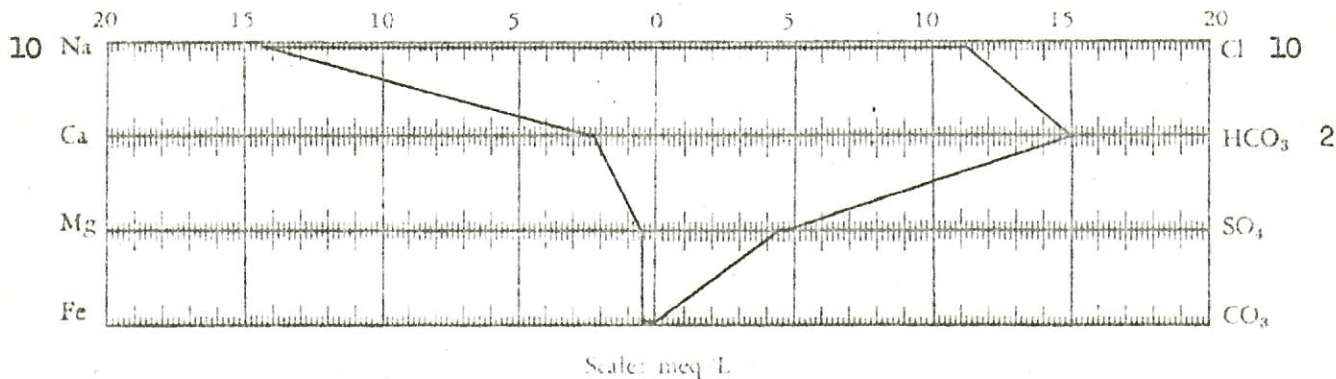
Resistivity 0.71 ohm-meters @ 77 °F

Hydrogen Sulfide ABSENT

pH 7.2

Constituents	meq/L	mg/L
Sodium	<u>143</u>	<u>3,289</u>
Calcium	<u>2.31</u>	<u>46.3</u>
Magnesium	<u>0.40</u>	<u>4.9</u>
Iron	<u>0.44</u>	<u>12.3</u>
Barium	<u>ABSENT</u>	

Constituents	meq/L	mg/L
Chloride	<u>111</u>	<u>3,940</u>
Bicarbonate	<u>30</u>	<u>1,830</u>
Sulfate	<u>4.58</u>	<u>220</u>
Carbonate	<u>ABSENT</u>	
Hydroxide	<u>ABSENT</u>	



All analyses except iron determination performed on a filtered sample.