Cable Address BAUMGARDIL .: .

BAUMGARTNER OIL COMPANY USA #1

NW NE 19-8S-38E (Bluitt Field)

Roosevelt County, New Mexico

GEOLOGICAL REPORT

Spud Date: July 8, 1969 Completion Date: August 4. 1969 Well Status: Producing Total Depth: 4775' Driller and Logger Surface Casing Record: Ran joints of 8-5/8" 20# csg. Landed @ 325' and cemented w/200 sx. cement, 4% gel & 2% CaCl. Contractor: Verna Drilling Co., Levelland, Texas Tool Pusher: Roy McGuire Geologist: J. C. Harrod Elevation: 4005'G.L., 4014'K.B. Production Pipe: Ran 154 joints 5-1/2" 14# new csg. Landed @ 4775'. Cemented w/125 sx. 2% gel & 10% salt Logging Program: Laterolog - TD - B/surf. csg. Micro-Laterolog - TD - 3750' Densilog - TD - 3500' Service Companies: Dresser Atlas (Logs & Perforations) Dresser Magcobar (Mud) B.J., Inc. - (Acid Treating)

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WELL DATA

LOG TOPS

San Andres	3914'
PSI Zone	4452'
First Porosity Zone	4500'-4764'
Second Porosity Zone	4724'-4774'

SAMPLE DESCRIPTION

4500-4530'	Sample analysis commenced @ 4500'. Dolomite tan-gry. hd. argillaceous to slightly argillaceous w/anhydrite stringers & anhydrite infilling in crystal forms.
4530-4600'	Dolomite AA/traces of dark tan-gry. Finely crystalline
	& micro-granular dolomite w/low-poor porosity. No visible stain.
4600-4730'	Dolomite AA/increase in streaks of porosity AA & Mc.
4730-4740'	Anhydrite light -medium gry., hard w/thin stringers of
	hard tan-gry. dolomite AA (Est. Top Porosity @ 4717')
4740-4775'	Dolomite dark tan-gry. Finely crystalline & micro-
	granular w/los-poor porosity. Traces of pinpoint vugular
	porosity. Traces of slight oil stain w/dark golden yellow
	fluorescense.
TD 4775'	30-minute circulating sample Dolomite AA
	60-minute circulating sample Dolomite AA

	0	L.	
90-minute	circulating	sample	Dolomite AA

<u>No.</u>	Size	Make	Туре	Depth Out	Footage	Hours
	12-1/4	Hughes	OSC-J	3251	3251	4-3/4
1	7-7/8	11	CIC3AJ	12091	884'	11 - 1/4
2	11	! 1	CIC-J	25261	1317'	19-3/4
3	t t	ч <u>т</u>	CIC-J	35381	1012'	18-3/4
4	! 1	11	OSC-J	3953 '	415'	14-3/4
5	! !	11	OWV	4252†	2991	20-1/2
6	11	1 !	OWVC	4478'	2261	18-1/2
7	11	1 1	OWC-J	46151	137'	18-3/4
8	11	11	OWC-J	46951	80'	11-1/4
9	11	11	OWC-J	4775'	80'	11-1/4

BIT RECORD

MUD RECORD

Type Mud: Salt Gel, 3-10% oil properties @ 4616' drilling; Weight 10.4#; Funnel Viscosity 38; Water Loss 11.4; Chloride 166,000 ppm; Oil Content 3% by Volume; Solids Content 6% by Volume; PH 6.5% by Volume. .

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SLOPE TESTS *

Date	Depth	Degree Inclination	Date	Depth	Degree Inclination
7-8-69	3251	3/4	7-11-69	30291	3/4
7-10-69	8181	3/4	7-12-69	35251	1-1/4
7-10-69	1209'	1 / 2	7-13-69	3953'	1 - 1 /2
7-10-69	1707'	3/4	7-14-69	42521	1 - 1 / 4
7-10-69	2200'	3/4	7-16-69	4615'	3/4
7-11-69	25261	3/4	7-17-69	4775'	3/4

DRILLING TIME

10' Drilling Time: 4470-4700'

4470-4500'								60	47	58
4500-4600'	64	73	82	80	76	89	96	95	78	90
4600-4700'	100	50	51	77	90	84	102	86	60	94

5' Drilling Time: 4700-4775'

4700-4750'	27	36	47	47	47	50	39	39	30	40
4750-4775'	34	37	35	51	62					

PRODUCTION HISTORY

First Porosity Zone: Perfs: 4684-4706' w/16 shots 4632-4681' w/22 shots 4592-4632' w/12 shots

- July 22 Ran tbg. w/pkr. & spotted 1,000 gals. acid of perfs. Raised pkr. & set it @ 4,555' above perf. interval. Acidized w/a total of 5,000 gals. 15% Hcl w/inhibitors. Emulsion breaker added. Injected 75 ball sealers spaced in acid. Injected @ 4-1/2 bbls. min. w/1600# IP increasing to 2100# @ end of treatment. SI 30 min. Surf. press. 850#. Released press. Flowed back 50 bbls. acid wtr. in 1st hr. & well died. Ran swab 6 times 1st run, FL @ the surf. 2650', 2nd run 3650', 3rd run 4100', 4th run no fluid, 5th run waited 20 min. & had 150' of build up.
- July 23 6th run after 1/2 hr. had 400' of build up & good gas flow. 7th run no fluid, good gas flow. 9th run gas. 7:40 PM blowing gas. Lit a flare & the flare was 20' long & 10' high. Est. about 300,000 cu. ft./day. SI 8:00 PM, 1450# psi. Swabbed about 16 BLW, getting good gas flow right after we pull swab. Swabbing f rom below pkr. Have to kill well & go in & perf. the lower zone.
 July 25 Second Porosity Zone (Main Pay Zone) Perf: 4760-4762' w/4 shots

4734-4754' w/40 shots Set prod. retainer @ 4742'. Acidized w/5,000 gals. @ 8 BPM injection rate w/3500# average injection press. Used 66 glass

injection rate w/3500# average injection press. Used of glass
balls w/good action. Press. bled down to zero. Well commenced
flowing back load acid wtr. & oil (15%). Swabbed & flowed oil @
3.3 BPH. Pumping unit installed to increase daily production
average. Initial Potential Pumping: 140 BOPD.

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> * This is a statement verfying that the slope tests ran by Verna Drilling Company on the Baumgartner Oil Company #1 USA well were checked by me at the well site upon my arrival on July 14, 1969.

It is my belief that the hole deviations as reported, as well as witnessed, by me are a true survey for the hole.

Johnny C. Harrod

Well Site Geologist

STATE OF COLORADO) CITY AND) ss. COUNTY OF DENVER)

Before me, Wm. R. Pfeifer, Jr., a Notary Public in and for said State, on this 21st day of August, 1969, personally appeared Johnny C. Harrod, to me known to be the identical person subscribed the name of the maker thereof to the foregoing instrument and acknowledged to me that he executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of such corporation for the uses and purposes therein set forth.

Witness my hand and official seal.

My commission expires February 13, 1972.