

Martin K. Dubois

Consulting Geologist

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January 5, 1989

GEOLOGIC REPORT

Simco Petroleum #14 C. Heim

E/2 SE SE 24-8S-21E

Leavenworth County, Kansas

Daily Progress:

- 12/29 Moved on location, set 7 5/8" surface casing at 81', plug down at 6:40 p.m.
12/30 Drilled out beneath surface casing at 10:00 a.m., shut down for weekend at 10:00 p.m., 460'
1/1 Commenced drilling at 8:30 p.m.
1/2 1000', mixing mud, at 8:00 a.m., RTD of 1290' reached at 10:45 p.m.
1/3 Ran 4 1/2" production casing, set at 1285', 2' off LTD, plug down at 7:50 a.m.

Service Companies:

Drilling contractor: Van Drilling, Inc.
Cement: Sun Cementing and Acidizing
Drilling Mud: Trotter Supply
E-Logs: Log Tech

Formation Tops (E-Log Depths):

	#14 C. Heim E/2 SE SE 24-8S-21E GL 870(est.)	Structural Relation to #19-1 Ewert NE SW SW 19-8S-22E
Lansing	135(+735)	-9
Base Kansas City	460(+410)	-12
Cherokee	704(+166)	-9
Coal Marker	1088(-218)	-18
Upper McLouth SS	1170(-300)	-14
Burgess Sandstone	1218(-348)	-4
Miss. St. Louis	1239(-367)	-1
Spergen	1270(-400)	DNP
Total Depth	1287(-417)	--

Hydrocarbon Shows:

1170-74 Upper McLouth Sandstone
Sandstone, gray, shaley, fine to medium grained, poor porosity, slight show of dead oil, no odor;
E-Log indicates shaley and tight

1220-34 Burgess Sandstone

Sandstone, light tan, fine grained, rounded, well sorted, glauconitic, good porosity, slight odor, light oil stain, slight show of gas bubbles; E-Logs calculate 25% porosity, 40 ohms resistivity, 24% water saturation in upper 5 feet, 22% porosity, 18 ohms resistivity, 41% water saturation in lower 9 feet; should be gas productive

Recommendation/Summary:

It was recommended that production casing be set 2 foot off bottom to further test the gas shows in the Burgess Sandstone. It is recommended that the sand be perforated from 1220-24 with 2 or 3 shots per foot and produced without stimulation. Some swabbing is likely to be needed to assist in cleaning up the reservoir since the pressure is likely to be reduced.

Structure lost with regard to the #19-1 Ewert well, located a quarter mile east, was regained by the time the Burgess and Mississippi were encountered. The change in structure in the upper beds is apparently due to the virtual absence of Upper McLouth sandstone. The #14 C. Heim well apparently encountered the very western edge of the McLouth sand body from which, along with the Burgess, production is derived from wells to the east. Fortunately the Burgess sand was present in similar quantities as wells to the east.

Respectfully submitted,

Martin K. Dubois

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MKD:sj



SUN CEMENTING AND ACIDIZING, INC.

Box 165
Eureka, Kansas 67045

Cementing Ticket
and Invoice Number

2426

Date 1-3-89	Customer Order No.	Sect. 24	Twp. 8S	Range 21E	Truck Called Out 12:30 AM	On Location 4:00 AM	Job Began 8:00 AM	Job Completed 8:55 PM
Owner SIMCO Petroleum		Contractor VAN DRUG. Co.			Charge To SIMCO Petroleum			
Mailing Address P.O. Box 1515		City Cheyenne			State WYOMING 82003			
Well No. & Form C. Heim # 14		Place LEAVENWORTH			State KANSAS			
Depth of Well 1287'	Depth of Job 1285'	Casing (New) 4 1/2" (Used)	Size 9.5#	Weight	Size of Hole Amt. and Kind of Cement 6 1/2" 90 SKS 50/50	Cement Left in casing by	Request (Necessity) 0'	feet
Kind of Job LONGSTRING					Drillpipe 50 SKS REG	(Rotary) Cable	# 38	Truck No.

Price Reference No. # 1
Price of Job 493.00
Second Stage
IN FIELD Mileage N/C
Other Charges
Total Charges 493.00

Remarks PIG up TO 4 1/2" CASING, BREAK CIRCULATION w/ 15 Bbls Fresh WATER, MIXED 90 SKS 50/50 Pozmix CEMENT w/ 10% Gel, TAIL IN w/ 50 SKS REGULAR CEMENT w/ 2% Gel, 2% CaCl2. SHUT DOWN, WASH up, Released Plug, Displaced w/ 20.8 Bbls Fresh WATER. FINAL Pumping Pressure 300 PSI. Bump Plug TO 900 PSI. Check Float, Float Head GOOD CEMENT RETURNS

RAN WIRE LINE TAG PLUG @

Cementor KEVIN MCCOY

Helper Steve M., Steve R.

District EUREKA

State KANSAS

The above job was done under supervision of the owner, operator, or his agent whose signature appears below.

Thank you

John E. Heim

Agent of contractor or operator

Sales Ticket for Materials Only

Quantity Sacks	BRAND AND TYPE	PRICE	TOTAL
90 SKS	50/50 Pozmix Cement	3.97	357.30
150 #	Gel 2% Allowed	N/C	N/C
600 #	Gel 8% ADDITIONAL	6.90	41.40
50 SKS	REGULAR CLASS "A" Cement	4.63	231.50
100 #	Gel	6.90	6.90
100 #	CaCl2	28.00	28.00
1	4 1/2" Top Rubber Plug	23.50	23.50
	170 SKS Handling & Dumping	.50	70.00
Plugs	6.6 TONS Mileage 60	.70	277.20
	Sub Total		1528.80
	Delivered by Truck No. B-34	Discount 30 DAYS 10%	152.88
	Delivered from Eureka, Ks.	Sales Tax 4%	35.31
	Signature of operator Kevin McCoy	Total	1411.23