

STATE OF KANSAS
 STATE CORPORATION COMMISSION
 130 S. Market, Room 2078
 Wichita, KS 67202

WELL PLUGGING RECORD
 K.A.R.-82-3-117

API NUMBER 15-163-01477-0020

LEASE NAME ~~Howatt~~ Howatt ^{KCC} _{ZAP}

TYPE OR PRINT
 NOTICE: Fill out completely
 and return to Cons. Div.
 office within 30 days.

WELL NUMBER 1

 Ft. from S Section Line

 Ft. from E Section Line

LEASE OPERATOR Graham-Michaelis Corporation

SEC. 2 TWP. 9S RGE. 17 (E) of (W)

ADDRESS P.O. Box 247 Wichita, Ks. 67201

COUNTY Rooks

PHONE#(316) 264-8394 OPERATORS LICENSE NO. 5134

Date Well Completed

Character of Well Oil

Plugging Commenced 5-1-96

(Oil, Gas, D&A, SWD, Input, Water Supply Well)

Plugging Completed 5-1-96

The plugging proposal was approved on (date)

by Dennis Hamel (KCC District Agent's Name).

Is ACO-1 filed? If not, is well log attached?

Producing Formation Depth to Top Bottom T.D. 3450' 3490'

Show depth and thickness of all water, oil and gas formations.

OIL, GAS OR WATER RECORDS | CASING RECORD

Formation	Content	From	To	Size	Put In	Pulled out
				8 5/8"	243'	none
				5 1/2"	3489'	1706'

Describe in detail the manner in which the well was plugged, indicating where the mud fluid was placed and the method or methods used in introducing it into the hole. If cement or other plugging materials were used, state the character of same and depth placed, from feet to feet each sack of cement. Plugged off bottom with sand to 3090' and 5 sacks cement. Shot casing at 1706', pulled 1 joint of casing, Pumped 110 sacks cement with 300# hulls, Pulled to 1300' pumped 30 sacks cement with 100# hulls, pulled to 750' pumped 30 sacks cement with 100# hulls, pulled to 75' circulated cement to surface with 40 sacks cement, pulled casing, topped off with 10 sacks cement. 60/40 10% gel Plugging complete.

Name of Plugging Contractor Mike's Testing & Salvage, Inc. License No. 31529

Address P.O. Box 209 Chase, Kansas 67524

NAME OF PARTY RESPONSIBLE FOR PLUGGING FEES: Graham-Michaelis Corporation Wichita, Ks.

STATE OF Kansas COUNTY OF Rice, ss.

Mike Kelso (Employee of Operator) or (Operator) above-described well, being first duly sworn on oath, says: That I have knowledge of the facts and matters herein contained and the log of the above-described well as filed to be the same are true and correct, so help me God.

(Signature) [Signature]

(Address) P.O. Box 209 Chase, Kansas 67524

SUBSCRIBED AND SWORN TO before me this 8th day of May, 19 96

[Signature]
 Notary Public

My Commission Expires:



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 MAY 10 3 10
 5/10/96 KANSAS CORP.

GEOLOGICAL REPORT

FRANCIS WHISLER

WELL 1 LEASE Howat

SE NE SE
LOCATION Sec. 2-9-17, Rooks County, Kansas

GEOLOGIST
RUSSELL, KANSAS

15-163-01477-00-00

OPERATOR: Bennett & Roberts Oil Operations
Russell, Kansas

CONTRACTOR: Bennett & Roberts Drilling, Inc.
Russell, Kansas

ELEVATION: Laughlin-Simmons

Derrick Floor: 2003'

Kelly Bushing: 2006'

All measurements shown in this report
are taken from Kelly Bushing.

SAMPLES: 10' intervals from 2800' to 2950'
5' intervals from 2950' to 3490', T.D.

All samples were examined, described and
will be sent to the Kansas Sample Library
at Wichita, Kansas.

DRILLING TIME: 1' intervals from 2800' to 3490', T.D.

A copy of the drilling time is included
with this report.

COMMENCED: Sept. 15, 1962

COMPLETED: Sept. 27, 1962

CASING RECORD: 243' of 8 5/8" surface
3489' of 5 1/2" production

STATUS: Producer

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1962 APR - 3 P 12:22

4/3/96

15-163-01477-00-00

#1 Howat

FORMATION TOPS:

Topeka Lime:	2886	(- 880)
Heebner Shale:	3098	(-1092)
Toronto Lime:	3118	(-1112)
Lansing-Kansas City:	3140	(-1134)
Base of Kansas City:	3385	(-1379)
Arbuckle Dolomite:	3432	(-1426)
Total Depth:	3490	(-1484)
Production Casing:	3489	(-1483)

SAMPLE DESCRIPTIONS:

Topeka:

- 3000-05: Ls; white to off white, dense with trace of tight oil stain.
- 3028-32: Ls; white, dense with trace of tight oil stain.
- 3043-50: Ls; white, tan, xln, fos with rare spotty oil stain, poor saturation, and slight porosity with trace of free oil. Open on DST #1.
- 3065-71: Ls; white-cream, fos with rare spotty oil stain, poor to fair saturation, fair fos porosity and trace of free oil. Open on DST #1.

DRILL STEM TEST #1: 3040-3072: Tool open 1 hour with weak blow throughout test. Recovered: 110' of muddy salt water. Initial bottom hole pressure was 1115 psi. Final bottom hole pressure was 1055 psi. Flow pressures ranged from 0 to 110 psi.

Toronto:

- 3118-21: Ls; white, fine xln, slight porosity with rare scattered oil stain, poor saturation and trace of free oil. Open on DST #2.

Lansing-Kansas City:

- 3140-45: Ls; white, fine xln, with slight porosity, poor to fair saturation and trace of free oil. Open on DST #2.

DRILL STEM TEST #2: 3105-3150: Tool open 1 hour with strong blow throughout test. Recovered: 85' of gas and 155' of heavily oil and gas cut mud. Initial bottom hole pressure was 935 psi and Final bottom hole pressure was 800 psi. Flow pressures ranged from 95 to 125 psi.

- 3174-70: Ls; white, tan, to light gray, xln, sucrosic and fos. Rare oil stain and poor saturation. Slight porosity but no free oil. Not considered commercial.
- 3195-06: Ls; white, cream, xln and fos with occasional oil stain, poor to fair sat. Some free oil and fair porosity. Open on DST #3.
- 3230-33: Ls; white, xln, fos, with occasional oil stain, poor to fair saturation, with trace of free oil. Only slight porosity. Open on DST #3.

DRILL STEM TEST #3: 3187-3235: Tool open 1 hour with weak blow throughout test. Recovered: 15' of gas and 45' of very slight oil cut mud. Initial bottom hole pressure was 405 psi and final bottom hole pressure was 130 psi. Flow pressures ranged from 0 to 90 psi.

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4/3/26

#1 Howat

samples, cont.

- 3239-46: Ls; white, oolitic with scattered stain, fair sat. and free oil. Abundant barren porosity. Probably water bearing, but may make some oil.
- 3286-90: Ls; light gray dense with trace of stain.
- 3298-08: Ls; white, xln, slight fos with fair xln and fos porosity. Good stain and fair saturation. Free oil present and some dark stain. Faint odor.

DRILL STEM TEST #4: 3289-3310: Tool open 1 hour with very weak, intermittent blow throughout test. Recovered: 25' of slight oil cut mud. Initial bottom hole pressure was 510 psi and final was 155 psi. Flow pressures were 0.

- 3320-26: Ls; white, tan, xln, shaley and dense with slight porosity. Rare oil stain and poor saturation. No free oil. Not considered commercial.
- 3349-62: Ls; white to light gray, fine xln and mostly dense with fair staining and fair saturation. Trace of free oil and faint odor. Porosity appears to be from 3349-53 and 3359-62.

DRILL STEM TEST #5: 3333-3360: Tool open 1 hour with very weak blow for 14 minutes. Recovered: 18' of very slight oil cut mud. Initial bottom hole pressure was 940 psi. Final bottom hole pressure was 133 psi. Flow pressures were 0.

- 3371-75: Ls; light gray, xln, and dense to oolitic with rare light stain. Fair saturation, but tight. Not commercial.

Arbuckle Dolomite:

- 3432-37: Dol; white, tan and light gray with scattered dark live oil stain in fine to coarse crystalline porosity. Fair saturation and good odor.

DRILL STEM TEST #6: 3425 to 3437: Tool open 30 minutes with very weak blow for 15 minutes. Recovered: 15' of mud with no show of oil. Initial bottom hole pressure was 865 psi and final was 498 psi. Flow pressures were 0.

- 3437-47: Dol: as above with stain and saturation as above with free oil and odor.
- 3447-56: Dol; tan, xln and oolitic with good porosity and some barren porosity. Less oil stain than above and wet samples had salty taste.
- 3456-63: Dol; tan and dense with less stain.
- 3463-67: Dol; white to tan, fine to coarse xln, and oolitic with good porosity. Rare oil stain and free heavy oil. Barren porosity. No odor.
- 3467-88: Dol; white, tan, pink with rare stain. Some free heavy globules of oil and no odor. Good porosity.
- 3478-86: Dol; more dense with rare oil stain.
- 3486-90: Dol; soft, white, fine to coarse crystalline with abundant glauconite.

#1 Howat

REMARKS & RECOMMENDATIONS:

The #1 Howat ran 8' higher on top of the Lansing, the the #2 Traynor and flat with Murfin-Comeau's #1 Hrabe.

Several zones capable of commercial production were encountered in the #1 Howat. They are as follows:

Toronto:	3118-21	
Lansing:	3140-45	(top zone)
	3195-06	(60' zone)
	3230-33	(80' zone)
	3298-08	(160' zone)
	3349-53	(200' zone)
Arbuckle:	3432-47	(top of Arb)

A gamma ray-Neutron & collar log should be run prior to completing; and all zones of porosity should be accurately located. Perforation should be done from collar log.

In addition to the above listed zones; there are two zones that may make some oil but would possibly be mostly water. 3174-78 (30' zone) and 3239-46 (90' zone). I believe that the 160' zone, from 3320-26 would be too shaley to produced commercially.

Respectfully submitted;

Francis Whisler
Francis Whisler

#1 Howat

DRILLING TIME:

2800-50:	2-2-2-2-2 2-1-2-2-2	1-1-1-1-1 2-2-2-2-2	1-1-2-3-3 1-1-1-1-1	4-3-1-1-1 1-1-1-1-1	1-2-2-2-2 1-1-1-1-1	✓
2850-00:	1-1-1-1-1 1-1-2-1-1	1-2-1-1-2 2-2-3-3-3	2-2-1-3-2 3-4-6-3-4	2-3-2-2-2 3-3-3-6-4	2-1-2-2-2 5-4-5-4-4	✓ fudding up
2900-50:	3-5-4-3-5 6-3-3-4-3	4-3-6-6-4 2-6-3-4-4	4-6-6-5-5 3-6-5-6-4	6-6-4-5-5 5-4-5-7-7	4-5-6-5-6 5-5-4-3-5	✓
2950-00:	5-4-5-5-3 5-7-6-4-5	3-3-3-4-4 7-7-8-4-3	6-8-6-7-5 6-4-3-4-3	6-5-4-5-4 3-3-3-4-4	4-4-5-4-5 4-7-7-9-9	✓
3000-50:	8-8-8-8-8 5-3-3-4-6	8-7-9-9-9 6-6-8-8-6	7-7-8-9-10 8-5-5-8-8	9-9-8-11-11 8-7-4-2-1	11-13-4-5-4 6-7-5-6-6	✓
3050-00:	8-9-9-12-12 4-4-4-5-6	10-7-10-9-9 5-6-6-5-5	11-11-10-7-5 4-6-7-8-7	4-4-3-4-5 6-7-6-6-6	5-7-4-4-5 7-6-5-4-3	DST at 3072
3100-50:	3-5-3-5-6 6-7-9-8-8	5-4-5-4-5 5-3-3-3-4	4-4-5-5-5 3-4-3-2-3	4-4-5-4-4 4-5-4-5-5	4-9-7-6-7 6-7-9-9-8	DST at 3150
3150-00:	6-5-7-5-5 4-5-5-7-6	4-4-6-7-5 5-3-2-2-4	5-4-4-5-4 8-7-8-5-4	5-4-5-5-3 4-5-5-4-4	3-3-3-4-3 5-5-5-6-5	
3200-50:	7-6-4-4-4 5-10-5-4-3	5-7-8-6-5 7-6-6-8-8	7-7-6-5-5 5-5-6-4-4	5-4-4-3-6 4-3-3-3-4	9-10-9-6-5 5-6-8-8-7	Misrun at 3210 DST at 3235
3250-00:	10-5-5-6-6 8-5-8-10-9	8-8-7-6-6 10-8-7-6-5	6-7-7-7-6 6-8-6-9-8	5-5-4-6-7 10-8-9-9-9	7-6-4-5-6 8-6-6-6-6	✓
3300-50:	6-8-6-6-6 5-6-4-4-6	6-3-5-8-8 9-10-9-9-9	6-7-8-8-7 9-7-6-3-3	4-5-6-4-3 7-6-6-4-5	4-4-5-5-4 6-7-6-3-5	DST at 3310
3350-00:	7-6-7-10-9 11-11-9-10-9	9-10-10-10-9 11-11-8-9-8	7-9-10-10-11 6-5-6-6-5	6-6-6-7-7 6-7-9-8-4	7-10-7-8-10 7-6-7-5-7	DST at 3360
3400-50:	4-5-8-9-10 10-10-9-4-8	8-7-7-8-6 8-9-4-5-4	13-10-9-8-8 7-6-6-4-4	7-6-8-8-10 3-3-4-3-3	11-11-10-11-11 3-2-5-4-3	DST at 3437
3450-90:	3-2-4-4-3 3-3-2-4-5	3-4-4-4-4 4-4-3-3-3	4-4-5-2-3 4-2-1-1-4	5-4-7-6-4	5-4-3-3-4	