

TYPE

AFFIDAVIT OF COMPLETION FORM

ACO-1 WELL HISTORY

SIDE ONE

State Geological Survey

WICHITA BRANCH

Two (2) copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within thirty (30) days after the completion of a well, regardless of how the well was completed.

Attach separate letter of request if the information is to be held confidential. If confidential, only file one copy. Information on Side One will be of public record and Side Two will then be held confidential.

Applications must be made on dual completion, commingling, salt water disposal, injection and temporarily abandoned wells.

Attach one copy only wireline logs (i.e. electrical log, sonic log, gamma ray neutron log, etc.). (Rules 82-2-105 & 82-2-125) KCC# (316) 263-3238.

LICENSE # 6393 EXPIRATION DATE June 30, 1984

OPERATOR BROUGHER OIL, INC. API NO. 15-185-21,911

ADDRESS P.O. Drawer 1367 COUNTY Stafford, Co., Ks
Great Bend, Ks 67530 FIELD Kachelman Ext.

** CONTACT PERSON Joe E. Brougher PROD. FORMATION Simpson Sand
PHONE 316-793-5610

PURCHASER Inland Crude Purchasing Corporation LEASE Bunker

ADDRESS 200 Douglas Building WELL NO. #2
Wichita, Ks 67202 WELL LOCATION SE NE NE

DRILLING Mohawk Drilling, Inc. 1320 Ft. from North Line and

CONTRACTOR ADDRESS P.O. Drawer 1362 330 Ft. from East Line of
Great Bend, Ks 67530 the NE/4(Qtr.) SEC 19 TWP 25 RGE 13 (W).

PLUGGING CONTRACTOR ADDRESS WELL PLAT (Office Use Only)

TOTAL DEPTH 4357 PBTD

SPUD DATE 12-15-83 DATE COMPLETED 12-23-83

ELEV: GR 1952' DF 1960' KB 1962'

DRILLED WITH (CABLE) (ROTARY) (AIR) TOOLS.

DOCKET NO. OF DISPOSAL OR REPRESSURING WELL BEING USED TO DISPOSE OF WATER FROM THIS LEASE

Amount of surface pipe set and cemented 433' DV Tool Used? No

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

Amount and kind of material used	Depth interval treated
500 Gal. 15% MCA	4262'-4272'
40,000 Plus # Sand	4262'-4272'

Date of first production	Producing method (flowing, pumping, gas lift, etc.)	Gravity
1-25-84	Pumping	
Estimated Production -I.P.	OR 50 bbls. Gas 0 MCF Water % 50 bbls. Gas-oil ratio CFS	
Disposition of gas (vented, used on lease or sold)	Perforations	4262'-4272'

Joe E. Brougher

OPERATOR Brougner Oil, Inc. LEASE Bunker Well #2 SEC. 19 TWP. 25 RGE. 13WELL NO. #2

FILL IN WELL INFORMATION AS REQUIRED:

WELL NO. #2

Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

SHOW GEOLOGICAL MARKERS, LOGS RUN, OR OTHER DESCRIPTIVE INFORMATION.

FORMATION DESCRIPTION, CONTENTS, ETC.	TOP	BOTTOM	NAME	DEPTH	DATUM
Check if no Drill Stem Tests Run.					
DRILLERS WELL LOG					
Shale	0	195'	FORMATION	DEPTH	DATUM
Red Bed & Shale	195'	400'	Anhydrite	830	+1132
Red Bed & Shale	400'	435'	Heebner	3537	-1575
Red Bed	435'	835'	Toronto	3555	-1593
Anhydrate	835'	853'	Douglas	3575	-1613
Shale	853'	1200'	Brown Lime	3689	-1727
Shale w/Lime	1200'	1935'	Lansing	3721	-1759
Shale	1935'	2350'	Base Kansas Ct	4005	-2043
Lime & Shale	2350'	2735'	Conglomerate	4062	-2100
Lime & Shale	2735'	3110'	Mississippi	4119	-2157
Shale & Lime	3110'	3380'	Kinderhook	4129	-2167
Lime	3380'	3640'	Shale	4197	-2235
Lime	3640'	3805'	Viola	4257	-2295
Lime	3805'	3918'	Simpson Shale	4260	-2298
Lime	3918'	4000'	Simpson Sand	4321	-235
Lime	4000'	4034'	Arbuckle	4355	-2393
Lime	4034'	4115'	RTD	4357	-2395
Lime	4115'	4139'	Electric Log		
Lime	4139'	4209'	TD		
Lime	4209'	4245'			
Lime & Sand	4245'	4281'			
Lime	4281'	4338'			
Arbuckle	4338'	4355'			
RTD		4355'			

If additional space is needed use Page 2, Side 2

Report of all strings set — surface, intermediate, production, etc. CASING RECORD (New) or (Used)

Purpose of string	Size hole drilled	Size casing set (in O.D.)	Weight lbs./ft.	Setting depth	Type cement	Sacks	Type and percent additives
Surface	12 1/4"	Used 8 5/8"	28#	433'	Common	300	60/40 Pozmix, 2% Gel, 3% C.C.
Production	7 7/8"	New 5 1/4"	15.5#	4356'	Common	150	50/50 Pozmix, 2% Gel, 18% Salt, .75% CFR2 5% Gilsonite per sa

LINER RECORD

PERFORATION RECORD

Top, ft.	Bottom, ft.	Sacks cement	Shots per ft.	Size & type	Depth interval
			2 Holes per foot		4262'-4272'
TUBING RECORD					
Size	Setting depth	Packer set at			

FILL IN WELL LOG AS REQUIRED: WELL NO. 2

Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

SHOW GEOLOGICAL MARKERS, LOGS RUN, OR OTHER DESCRIPTIVE INFORMATION.

FORMATION DESCRIPTION, CONTENTS, ETC.	TOP	BOTTOM	NAME	DEPTH
SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.				
<u>TORONTO SECTION:</u>				
LIMESTONE: Gray to white, chalky, poor visible porosity, trace of dark brown spotty stain, no show of free oil or odor in fresh samples.	3556'	3564'		
LANSING SECTION: LIMESTONE: Tan, finely crystalline, fossiliferous, slightly cherty, dense, no shows.	3722'	3728'		
LIMESTONE: Gray, fossiliferous, scattered fossil cast porosity, few pieces slightly sub-oocastic, no shows.	3745'	3753'		
LIMESTONE: Tan, fossiliferous, sub-oocastic, fair sub-oocastic porosity, slightly chalky, no show of free oil and questionable odor in fresh samples.	3762'	3778'		
LIMESTONE: Tan, fossiliferous, fair fossil cast porosity, no shows.	3790'	3794'		
LIMESTONE: Cream to gray, slightly fossiliferous, scattered fossil cast porosity, no shows.	3804'	3809'		
LIMESTONE: Tan, finely crystalline, slightly fossiliferous, cherty poorly visible porosity increasing white, chalky limestone at base, no shows.	3818'	3848'		
LIMESTONE: Gray, slightly fossiliferous, chalky, scattered porosity, black dead stain, no show free oil or odor in fresh samples.	3856'	3862'		
LIMESTONE: White, oolitic, chalky, poor visible porosity, no shows.	3884'	3896'		
LIMESTONE: Tan to beige oocastic, fair oocastic porosity, no shows.	3899'	3909'		

OPERATOR BROUGHER OIL, INC.

WICHITA BRANCH
LEASE NAME BUNKER #2

SEC. 19 TWP. 25S RGE. 13

FILL IN WELL LOG AS REQUIRED: WELL NO. 2

Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

SHOW GEOLOGICAL MARKERS, LOGS RUN, OR OTHER DESCRIPTIVE INFORMATION.

FORMATION DESCRIPTION, CONTENTS, ETC.

TOP

BOTTOM

NAME

DEPTH

SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC. CONT'D.

LIMESTONE:

Cream to white sub-oocastic, chalky, spotty stain, no shows of free oil or odor in fresh samples.

3938'

3946'

LIMESTONE:

Cream to white oolitic, slightly chalky, scattered porosity, spotty brown stain and saturation, trace of free oil and no odor in fresh samples.

3964'

3975'

LIMESTONE:

Tan, highly cherty, fossiliferous, scattered brown stain, show of free oil and no odor in fresh samples.

3991'

3996'

DRILL STEM TEST #1

Open: I.F. 45", F.F. 45", Blow: Weak, Recovery: 90' mud, Pressures: ISIP 1040 psi (45"), FSIP 979 psi (45"), IFP 21-41 psi FFP 52-64 psi, HSH 2075 - 2085 psi.

3946'

4000'

CONGLOMERATE SECTION:

LIMESTONE:

White to buff, cherty, dense, brown to black stain, few pieces very weak show of free oil, no odor in fresh samples. (PERFORATE.)

4069'

4076'

LIMESTONE:

As immediately above, plus chert, white, cream, spotty brown to black stain, no show of free oil or odor in fresh samples. (PERFORATE.)

4081'

4089'

CHERT:

White to cream, opaque plus limestone, cream to tan, highly cherty, dense scattered black stain.

4091'

4101'

CHERT:

Red to orange, opaque, plus trace white to gray, boney chert, scattered spotty brown stain, no show of free oil or odor in fresh samples.

4100'

4117'

MISSISSIPPIAN SECTION:

CHERT:

White to gray, boney, scattered pinpoint porosity, fair to good stain saturation, show of free oil and good odor in fresh samples, plus trace of limestone, white, highly cherty, dense, scattered brown stain, no show of free oil or odor in fresh samples. (PERFORATE.)

4119'

4129'

KINDERHOOK SECTION:

Brown to gray to green shale plus trace of tan chert, no show of free oil or odor in fresh samples.

4129'

4149'

OPERATOR BROUGHER OIL, INC.

LEASE NAME BUNKER #2

SEC. 19 TWP. 25S RGE. 13 (W)

FILL IN WELL LOG AS REQUIRED: WELL NO. 2

Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

SHOW GEOLOGICAL MARKERS, LOGS RUN, OR OTHER DESCRIPTIVE INFORMATION.

FORMATION DESCRIPTION, CONTENTS, ETC.	TOP	BOTTOM	NAME	DEPTH
SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC. CONT'D.				
DRILL STEM TEST #2: Open: I.F. 45", F.F. 45", Blow Strong, gas to surface 50 min. Gas gauged as follows: FFP 10 min 27,000 c.f.g. per day, 20 min 20,700 c.f.g. per day, 30 min 18,500 c.f.g. per day, 40 min 15,700 c.f.g. per day, 45 min 15,700 c.f.g. per day. Recovery: 248' slightly oil and gas cut mud, 566' heavily oil and gas cut mud, Pressures: ISIP 1081 psi (45"), FSIP 897 psi (45"), IFP 82-235 psi, FFP 205-286 psi, HSH 2209-2147 psi.	4046'	4139'		
VARIED COLORED SHALE: Plus scattered traces of varied colored chert, trace green sandy shale, no show.	4150'	4197'		
<u>VIOLA SECTION:</u>				
CHERT: White to gray to cream, boney, scattered tripolitic porosity, fair staining and Saturation, show of free oil and fair odor in fresh samples.	4197'	4205'		
CHERT: Gray to tan, dolomitic, semi-tripolitic porosity, good stain and saturation, show of free oil and fair odor in fresh samples. (PERFORATE.)	4205'	4211'		
DRILL STEM TEST #3 (Drillers Measurements) (Log Measurements) Open: I.F. 45", F.F. 45", Blow: Strong, Gas to surface in 10 min., Gas guaged as follows: IFP: 10 min. 78,000 c.f.g. per day, 20 min. 29,000 c.f.g. per day, 30 min. 32,000 c.f.g. per day, FFP: 10 min. 22,900 c.f.g. per day, 20 min. 18,500 c.f.g. per day, 30 min. 17,100 c.f.g. per day, 40 min. 15,700 c.f.g. per day, 45 min. 15,700 c.f.g. per day. Recovery: 2,195' clean gassy oil. Pressures: ISIP 1107 psi (45"), FSIP 1076 psi (45"), IFP 72-287 psi, FFP 298-503 psi, HSH 2241-2231 psi.	4195' 4197'	4209' 4211'		
CHERT: As immediately above, scattered stain saturation, trace of free oil and faint odor in fresh samples.	4211'	4230'		
CHERT: White to gray, boney, blocky, scattered stain, trace of free oil and faint odor in fresh samples.	4230'	4240'		
LIMESTONE: Tan to brown, highly cherty, dense scattered stain and saturation, no show of free oil or odor in fresh samples.	4244'	4257'		

OPERATOR BROUGHER OIL, INC LEASE NAME BUNKER #2 SEC. 19 TWP. 25S RGE. 13 (W)

FILL IN WELL LOG AS REQUIRED: WELL NO. 2

Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

SHOW GEOLOGICAL MARKERS, LOGS RUN, OR OTHER DESCRIPTIVE INFORMATION.

FORMATION DESCRIPTION, CONTENTS, ETC.	TOP	BOTTOM	NAME	DEPTH
<u>SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC. CONT'D.</u>				
<u>SIMPSON SECTION</u>				
SAND:	4260'	4280'		
Gray to white dolomitic, fair to good porosity, spotty brown stain and saturation, show of free oil and faint odor in fresh samples.				
DRILL STEM TEST #4	4252'	4281'		
Open: I.F. 30", F.F. 30", Blow: No blow, Recovery: 30' slightly oil cut mud. Pressures: ISIP 226 psi (30"), FSIP 123 psi (30%), IFP 31-41 psi, FFP 51-51 psi, HSH 2220-2262 psi.				
<u>ARBUCKLE SECTION:</u>				
DOLOMITE:	4321'	4329'		
Cream to white, medium crystalline, slightly sandy, questionable stain, no show of free oil or odor in fresh samples.				
DOLOMITE:	4329'	4338'		
Gray to tan to pink, finely crystalline, cherty, dense, no shows.				
DOLOMITE:	4340'	4355'		
Tan to gray, medium crystalline, fair intercrystalline porosity, no shows.				
ROTARY TOTAL DEPTH:		4355'		
LOG TOTAL DEPTH:		4357'		

DRILLERS WELL LOG

BROUGHER OIL, INC.
P. O. Drawer 1367
Great Bend, Kansas 67530

BUNKER #2 , API #15-185-21,911
330' South of SE NE NE Sec.19-25-13
Stafford County, Kansas

DATE COMMENCED: 12-15-83
DATE COMPLETED: 12-23-83

ELEVATION: 1952 GL

SURFACE PIPE: 8 5/8" Surface Casing set @431',
cemented w/300 sacks of 60/40, 2% Gel, 3% CC,
cement did circulate.


PRODUCTION CASING: 5 1/2" Casing set @4354', cemented
w/150 sacks 50/50 poz, 18% salt, 5# Gil./sk, 75% CFR2

0 - 195' Shale
195 - 400' Red Bed & Shale
400 - 435' Red Bed & Shale
435 - 835' Red Bed
835 - 853' Anhydrate
853 - 1200' Shale
1200 - 1935' Shale w/Lime
1935 - 2350' Shale
2350 - 2735' Lime & Shale
2735 - 3110' Lime & Shale
3110 - 3380' Shale & Lime
3380 - 3640' Lime
3640 - 3805' Lime
3805 - 3918' Lime
3918 - 4000' Lime
4000 - 4034' Lime
4034 - 4115' Lime
4115 - 4139' Lime
4139 - 4209' Lime
4209 - 4245' Lime
4245 - 4281' Lime & Sand
4281 - 4338' Lime
4338 - 4355' Arbuckle
4355' RTD

A F F I D A V I T

STATE OF KANSAS)
COUNTY OF BARTON) ss.

Viann Brougher of lawful age, does swear and state that the facts and statements herein are true and correct to the best of her knowledge.


Viann Brougher