1

API NO. 15- \_\_\_051-249420000

STATE CORPORATION CONHISSION OF KANSAS OIL & GAS CONSERVATION DIVISION WELL COMPLETION FORM

WELL COMPLETION FORM	CountyEllis
ACO-1 WELL HISTORY DESCRIPTION OF WELL AND LEASE	Approx NE - SW - NW Sec. 9 Twp. 11 Rge. 19 X W
Operator: License #5663	· · · · · · · · · · · · · · · · · · ·
Name: Hess Oil Company	
Address P. O. Box 1009	Footages Calculated from Nearest Outside Section Corner: NE, SE, NW) or SW (circle one)
City/State/Zip <u>McPherson, KS 67460</u>	Lease Name <u>Hall</u> Well #
Purchaser:	Field Name
	Producing Formation
Phone (_316_) 241-4640	Elevation: Ground KB KB
	Total DepthPBTD
Contractor: Name: Shields Drilling Co., Inc.	Amount of Surface Pipe Set and Cemented at Feet
License: 5184	Multiple Stage Cementing Collar Used? Yes No
Wellsite Geologist: <u>James C. Hess</u>	If yes, show depth set Feet
Designate Type of Completion X_ New Well Re-Entry Workover	If Alternate II completion, cement circulated from
OilSWDSIOWTemp. AbdSIGW	feet depth to sx cmt.
X Dry Other (Core, WSW, Expl., Cathodic, etc)	Drilling Fluid Management Plan Pot A 3-25-98, U.C. (Data must be collected from the Reserve Pit)
Operator:	Chloride content 30,000 ppm Fluid volume 500 bbls
Well Name:	
	Dewatering method used <u>Evaporation</u> Location of fluid disposal if had official 3-13-9
Comp. DateOld Total Depth	Location of fluid disposal if hauled offsite: 5-13-1
Deepening Re-perf Conv. to Inj/SWD PBTD	Operator Name
Commingled	Lease NameLicense No
Other (SWD or Inj?) Docket No.	
10-22-96 10-31-96 11-1-96	Quarter Sec TwpS RngE/W
pud Date Date Reached TD Completion Date	County Docket No
<ul> <li>Room 2078, Wichita, Kansas 67202, within 120 days of the Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on 12 months if requested in writing and submitted with the months). One copy of all wireline logs and geologist well</li> </ul>	be filed with the Kansas Corporation Commission, 130 S. Market spud date, recompletion, workover or conversion of a well. side two of this form will be held confidential for a period of e form (see rule 82-3-107 for confidentiality in excess of 12 report shall be attached with this form. ALL CEMENTING TICKETS lls. Submit CP-111 form with all temporarily abandoned wells.
Il requirements of the statutes, rules and regulations promulge ith and the statements herein are complete and correct to the	ated to regulate the oil and gas industry have been fully complied he best of my knowledge.
ignature Dick Hess	K.C.C. OFFICE USE ONLY
itle <u>Dick Hess. President</u> Date	F Letter of Confidentiality Attached
ubscribed and sworn to before me this 21st day of Feb	
9 97. otery Public Sound Tess	Distribution  KCCSWD/RepNGPA
BOTARY PITRI IC - State of	Kansas KGS PlugOther (Specify)
My Appt. Exp. 5 24	6-47_

Operator NameH	<u>ess Oil Compan</u>	Υ	Lease Name	Hall Hall		_ Well # .	1
0 0 * 44		East			illis		
Sec. 9 Twp. 11	_ kge <u>19</u> _	X West					-
INSTRUCTIONS: Show interval tested, tir hydrostatic pressures, if more space is need	ne toot open a , bottom hole t	and closed, flowing emperature, fluid rec	and shut-in nce	ssures whet	her chut-in nea		
Drill Stem Tests Take (Attach Additiona		X Yes No	☐ Log	Formatio	n (Top), Depth	and Datums	x Sample
Samples Sent to Geole	ogical Survey	X Yes No	Name		Тор		Datum
Cores Taken Yes X No			Anhydrite Base Anhydrite		1440 <i>°</i> 1482 <i>°</i>		
Electric Log Run (Submit Copy.)		Yes X No	Topeka Heebner Toronto	yai ice	3072 3290 3314	t t	( +626') ( -964') (-1182')
List All E.Logs Run:			Lansing Stark Sh	sas City rate	3330 3508 3541 3583 3625	· ·	(-1206') (-1222') (-1400') (-1433') (-1475') (-1517')
			Arbuckle RTD		3647 3666	,	(-15391)
		CASING RECORD					(-1558')
14 15	Report al			sed		_	
Purpose of String	Size Hole	l strings set-conduc	<del></del>			<del></del>	
	Drilled	Size Casing Set (In O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12-1/4"	8-5/8"	28#	261'	60/40 Pozmix	150	2% gel, 6% cc
		ADDITIONAL CEN	(ENTING/SQUEEZE	RECORD			
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	s Used Type and Percent Additives		s	
Protect Casing Plug Back TD			-				
Plug Off Zone							
Shots Per Foot	Specify Footag	RECORD - Bridge Plu e of Each Interval P	igs Set/Type Perforated	Acid, ( (Amount and	racture, Shot, d Kind of Mater	Cement Sq ial Used)	ueeze Record Depth
				·			
					<del></del>		
				<u> </u>	<del></del>	<del>.</del>	
TUBING RECORD	Size	Set At	Packer At	Liner Run	☐ <sub>Yes</sub> ☐	No	
Date of First, Resume	ed Production,	SWD or Inj. Produ	cing Method	owing $\square_{Pur}$	ping Gas Li	ft Oti	ner (Explain)
Estimated Production Per 24 Hours	oil A	Bbls. Gas	Mcf Water	Bbls.	Gas-Oil	<del></del>	Gravity
Disposition of Gas:	METHOD OF	COMPLETION		Pro	duction Interva	l	<del></del>
☐ Vented ☐ Sold	Used on Le	ease Open	Hole Perf.			· <del>-</del>	
(If vented, subm		$\Box$	(Specify)	buatty	- contin	9120	

ORIGINAL 15051:24942:0000

P.O. BOX 1009 McPHERSON, KANSAS 67460-1009 (316) 241-4640

### **ACO-1 Completion Form Attachment**

Hall #1

Approx. NE/4 SW/4 NW/4, Section 9-11-19W, Ellis County, KS, API #15-051-249420000

DST #1

Interval: 3210'-3300' Times: 30-45-60-90

Initial Flow: Very strong - bottom of bucket in 10 sec Final Flow: Strong - bottom of bucket in 1-1/2 min

Recovery: 720' Mud

995' Watery Mud (15% Water, 85% Mud) 600' Muddy Water (60% Water, 40% Mud)

Pressures: IH 1609#, IF 415-738#, ISI 1321#, FF 824-1032#, FSI 1233#, FH 1586#

Temp: 106F

**DST #2** 

Interval: 3285'-3380' Times: 30-45-60-90

Initial Flow: 2" blow building to bottom of bucket in 7 min

Final Flow: 1/2" blow building to 10-1/2"

Recovery: 5' Clean Oil

15' Slightly Oil & Water Cut Mud (5% Oil, 25% Water, 70% Mud) 355' Muddy Oil Specked Water (1% Oil, 60% Water, 39% Mud) Pressures: IH 1641#, IF 89-152#, ISI 819#, FF 160-223#, FSI 783#, FH 1602#

Temp: 104F

**DST #3** 

Interval: 3380'-3440' Times: 30-45-60-90

Initial Flow: 1/2" blow building to bottom of bucket in 16 min Final Flow: 1/4" blow building to bottom of bucket in 32 min

Recovery: 2' Clean Oil

258' Oil Specked Watery Mud (2% Oil, 38% Water, 60% Mud)

240' Muddy Water (80% Water, 20% Mud)

Pressures: IH 1690#, IF 57-158#, ISI 671#, FF 167-287#, FSI 673#, FH 1648#

Temp: 108 F

**DST #4** 

Interval: 3465'-3550' Times: 30-45-30-60

Initial Flow: 1/2" blow building to 1" Final Flow: 1/4" blow - died in 15 min

Recovery: 15' Mud

Pressures: IH 1820#, IF 43-47#, ISI 953#, FF 51-53#, FSI 955#, FH 1702#

Temp: 104 F

**DST #5** 

Interval: 3647'-3654'

Times: 60-45-10-45

Initial Flow: 3/4" blow building to 1-1/2"

Final Flow: No blow Recovery: 5' Heavy Tar Oil 10' Heavy Mud

Pressures: IH 1853#, IF 24-24#, ISI 935#, FF 22-22#-, FSI 941#, FH 1758#

Temp: NA

**DST #6** 

Interval: 3657'-3666'

Times: 60-60-60

Initial Flow: 1/2" blow building to bottom of bucket in 31 min Final Flow: Surface blow building to bottom of bucket in 36 min

Recovery: 580' Slightly Muddy Water

Pressures: IH 1835#, IF 17-142#, ISI 1143#, FF 152-263#, FSI 1135#, FH 1760#

Temp: NA

ALLIED CEN ...G CO., INC: 5029

REMIT TO P.O. BOX 31
RUSSELL KANSAS 67665

ORIGINAL

SERVICE POINT:

ROSSELL, RAINSAS 67665	IOINAL	Miles	<u> </u>	<del></del>
DATE (C) - Z.3 · C/c   TVVP. RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
		-	COUNTY	STATE
DLD OR NEW (Circle one)	in Macin	my IN this	15 Can	1/4
	-			
CONTRACTOR SWILL DIE	OWNER			
YPE OF JOB SAME TO THE	_		CEMENT	
HOLE SIZE \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	- AMOUNT OR	proro ISA	601.	· ~~~
TUBING SIZE DEPTH	_ AMOUNT OR	DERED <u>150</u>	-740 3.7	<u> </u>
DRILL PIPE DEPTH				
TOOL DEPTH				
PRES. MAX MINIMUM	_ COMMON		@	
MEAS, LINE SHOE JOINT				
CEMENT LEFT IN CSG. 16-75 15-5				
ERFS.	_ CHLORIDE _		•	<u> </u>
		<del>-</del>		. <u></u>
EQUIPMENT	<del></del>			
			-@ <i>-</i>	
UMPTRUCK CEMENTER VALUE				
153 HELPER TO (	- HANDLING		_@	<del></del>
BULK TRUCK	MILEAGE			<del>- · · · · · · · · · · · · · · · · · · ·</del>
ULK TRUCK	-			
DRIVER			TOTAL	
REMARKS:		SERVI	CE	
Cament Consulated	DEPTH OF JO	)B		
		CHARGE		
	_ EXTRA FOOT	TAGE	_@	
	MILEAGE		@	
	_ PLUG			
			_ @	<del></del>
			_@	1,
			TOTAL	· <del></del>
CHARGE TO: Hess oil to	-			•
TREET STATE ZIP		FLOAT EQU		•
31A1EZIP				
•			-@	
			_@	
<b>'</b>			TOTAL	,
				<i></i>
To Allied Cementing Co., Inc.	TAX		-	
or Amed Cementing Co., the.  You are hereby requested to rent cementing equipment	TOTAL CHAR	RGE		
and furnish cementer and helper to assist owner or				
contractor to do work as is listed. The above work was	DISCOUNT _		—— IF PAI	D IN 30 DAY
done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS ANE CONDITIONS" listed on the reverse side.	)			

# ALLIED CEMENTING CO., INC. 7303

REMIT TO P.O. BOX 31 RUSSELL, KANSAS 67665	GINAL SERVICE POINT:
	ALLED OUT ON LOCATION JOB START JOB FINISH 9:45 7M 11:36 pm 11:45 pm 2:15 pm
	COUNTY STATE
OLD ORNEW (Circle one)	1W '2S '2E
	10 20 20
CONTRACTOR SHIFLDS DALG RIGHT 2 TYPE OF JOB ROTARY PLUG	OWNER CEMENT
HOLE SIZE 7 18 / T.D. 3666	rior feet
CASING SIZE SA SURFACE DEPTH 261 TUBING SIZE DEPTH	AMOUNT ORDERED 225 St 40 62 Gen
DRILL PIPE 4 % F - H DEPTH 3642	- Ya# F10.8-A1 Per SK
TOOL DEPTH	
PRES. MAX MINIMUM	COMMON@
MEAS, LINE SHOE JOINT	POZMIX@
CEMENT LEFT IN CSG. PERFS.	GEL @
TERIS.	CHLORIDE@@
EQUIPMENT	@
201111211	
PUMP TRUCK CEMENTER	@
# 177 HELPER J. 1. 0 F	@@
BULK TRUCK	HANDLING@ MILEAGE
# 282 DRIVER	MILLAGE
BULK TRUCK  # DRIVER	TOTAL
REMARKS:	SERVICE
25 5K @ 3647 V	DEPTH OF JOB
25 SK @ 1440'	PUMP TRUCK CHARGE
100 SK @ 750	EXTRA FOOTAGE@
40 SK @ 300	MILEAGE @
10 SK & 40' + WIDER Plug	PLUG 1-9 5/2 Day Ilde @
10 SK @ MOUST HOLE	
Adds Hole	
CHARGE TO: HESS OIL COMPANY	TOTAL
STREET	
	FLOAT EQUIPMENT
CITYSTATEZIP	
	@
	TOTAL
T W O	TAX
To Allied Cementing Co., Inc.	
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or	TOTAL CHARGE
contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND	DISCOUNT IF PAID IN 30 DAYS
CONDITIONS" listed on the reverse side.	

SIGNATURE \_\_\_\_

## ORIGINAL

## HESS OIL COMPANY

15-051-24942-0000

P.O. BOX 1009 McPHERSON, KANSAS 67460-1009 (316) 241-4640

### GEOLOGICAL REPORT

HALL #1

1800' FNL, 1040' FWL of

SECTION 9 - 11S - 19W

ELLIS COUNTY, KANSAS

Commenced:

10-22-96

Elevations: 2103' GR, 2108' KB

Completed:

11- 1-96

Surface Pipe: 261' of 8-5/8" w/150sx

Contractor: Shields Drilling Company

Production Pipe: none

One foot drilling time was kept from 1400' to 1500' KB and from 2900' to rotary total depth. Ten foot drilling samples, (wet & dry) were kept from 3050' to rotary total depth.

Following are sample tops, descriptions of zones of interest (including all shows of oil & gas), and the results of all drill stem tests.

ANHYDRITE

1440 (+668)

BASE ANHYDRITE

1482 (+626)

15051-24942-000

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Hall #1 Page 2

**TOPEKA** 

3072 (- 964)

3236-41' KB

White, very finely crystalline, dense, limestone. Fair show of free oil in good intercrystalline porosity, no odor, fair stain, and a good cut. (some heavy stain)

3256-62' KB

White, fair to medium crystalline, dense, limestone. Good show of free oil in fair to good intercrystalline porosity, fair odor, good stain, and a strong cut.

HEEBNER

3290 (-1182)

DRILL STEM TEST #1

3210' TO 3300' KB

90' Anchor

Blow: Bottom of bucket in 10 sec. 2nd openning -- bottom of

bucket in 2½ min.

Times:

Open 30, Closed 45, Open 60, Closed 90.

Recovered:

720' Mud

1595' Mud Cut SW

Pressures:

IH 1590# IF 405-720#

ISPI 1317# FSIP 1246#

ricssures.

FH 1579# FF 821-1034#

3314 (-1206)

3314-22' KB

White to tan, very fine to fine crystalline, dense, limestone. Good show of free oil in poor intercrystalline porosity, fair odor, good stain, and a strong cut.

LANSING

TORONTO

3330 (-1222)

3333-41' KB

White, very finely crystalline, dense, limestone. Weak show of free oil in poor intercrystalline porosity, no odor, fair stain, and a fair cut.

3367-73' KB

White to tan, fine to medium crystalline, slightly oolitic, limestone. Great show of free oil in fair to good intercrystalline porosity, strong odor, good stain, and a great cut.

DRILL STEM TEST #2

3285' to 3380' KB

95' Anchor

Blow: Bottom of bucket in 7min., 2nd openning --- slow build to 10½".

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Hall #1 Page 3

DRILL STEM TEST #2 (cont. )

Times: Open 30, Closed 45, Open 60, Closed 90.

Recovered: 5' Clean Oil

15' Oil Specked Water Cut Mud (5% O, 25% SW, 70% M) 355' Oil Specked Mud Cut SW (1% O, 60% SW, 39% M)

Pressures: IH <del>1702</del># IF <del>61-14</del>2# ISIP <del>650#</del> FH <del>1651</del># FF <del>162-283</del># FSIP <del>658#</del> /590 /52-223 78)

3384-97' KB White, very finely crystalline, dense, limestone. Fair shows of free oil throughout interval in poor intercrystalline porosity, no odor, weak stain and weak cut. (some "tight" on-edge porosity)

3415-17' KB White to tan, very finely crystalline, slightly oolitic, limestone. Fair show of free oil in poor to fair intercrystalline porosity, no odor, good stain, and a good cut. (some heavy tar stain)

White to tan, finely crystalline, limestone. Good show of free oil in fair intercrystalline porosity, no odor, fair stain, and a good cut. (pieces White, very finely crystalline, dense, limestone w/heavy tar stain in "on-edge" porosity)

3380' to 3440' KB

DRILL STEM TEST #3

Blow: Bottom of bucket in 16 min. 2nd Openning --- Bottom of

bucket in 32 min.

Times: Open 30, Closed 45, Open 60, Closed 90.

Recovered: 2' Clean Oil

258' Oil Specked Water Cut Mud (2% O, 38% SW, 60% M)

60' Anchor

240' Mud Cut SW (80% SW, 20% M)

shows of free oil in very poor to poor intercrystalline porosity (some poor "on-edge" porosity) no odor, slight stain, and weak cuts.

 $\frac{\text{NOTE:}}{\text{time of this rig, often zones within 10' of each other are in the same sample tray.}$ 

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Hall #1 Page 4

LANSING (cont.	)
3468-73' KB	White, very finely crystalline, dense, limestone. Slight show of free oil in very poor "on-edge" porosity, no odor, weak stain, and a weak cut.
3484-90' KB	White, very finely crystalline, dense, limestone. Fair show of free oil in poor intercrystalline porosity, no odor, weak stain, and a good cut.
3500-04' KB	Tan, very finely crystalline, slightly oolicastic, limestone. Good show of free oil in fair intercrystalline porosity, fair odor, good stain, and a strong cut.
3520-25' KB	White, very finely crystalline, dense, limestone. Weak show of free oil in poor intercrystalline porosity, no odor, weak stain, and a weak cut.
3534-41' KB	White, very finely crystalline, dense, limestone. Fair show of free oil in poor intercrystalline porosity, no odor, weak stain, and a good cut.
BASE KANSAS CITY	3541 (-1433)
DRILL STEM TEST	#4 3465' to 3550' KB 85' Anchor
	Blow: Slow build to 1". 2nd openning died in 15 min.
	Times: Open 30, Closed 45, Open 30, Closed 60.
•	Recovered: 15' Mud
	Pressures: IH 1824# IF 51-51# ISIP 963# FH 1722# FF 61-61# FSIP 963#
CONGLOMERATE	3583 (-1475)
SIMPSON SAND	3625 (-1517)
<u>3625-31' КВ</u>	Clear, medium grainned, well sorted, well rounded, sandstone grains and clusters. No free oil, lots of heavy tar stain, in good "barron" intergrannular porosity. Fair cut on tar stain.

15:051:24942:00CC

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Hall #1 Page 5

ARBUCKLE

3647 (-1539)

3647-54' KB

White, very finely crystalline, dense, dolomite. Great show of free oil in fair intercrystalline and good "vuggy" porosity, very strong odor, lots of black stain, and a great cut! (oil looks very thick & tarry --- can shape with tweezers!)

DRILL STEM TEST #5

3647' to 3654' KB

7' Anchor

Blow: slow build to 1½". 2nd openning -- NO Blow!

Times: Open 60, Closed 45, Open 10, Closed 45.

Recovered: 5' Very Heavy Tarry Oil. (will not pour @ 60' F)

10' Heavy Mud

Pressures: ΙH 1855# IF 20-20# **ISIP** 943#

FH FF 1722# 20-20# FSIP 943#

3656-60' KB

White to tan, very fine to finely crystalline, dense, dolomite. Fair show of free oil in poor intercrystalline porosity, no odor, fair stain, and a good cut. (Very "tight" dolomite)

3660-66' KB

White to tan, fine to medium crystalline, dolomite. Great show of free oil in good intercrystalline porosity, good odor, great stain, and a great cut. (Some lighter oil!)

DRILL STEM TEST #6

3657' to 3666' KB

9' Anchor

Blow: slow build to bottom of bucket in 31 min. 2nd openning --

bottom of bucket in 36 min.

Times: Open 60, Closed 60, Open 60, Closed: 60.

Recovered: 5801 Slightly Mud Cut SW

Pressures: IΗ 1855# IF 30-142# ISIP 1145#

FH 1763# FF 152-263# FSIP 1135#

ROTARY TOTAL DEPTH

3666 (-1558)

No log was run, because all shows were tested (except slight shows from 3444-58'). It was decided to plug this well due to poor DST regoveries. The well was plugged on 11-1-96 at 7:15 am.

> James Hess

Geologist