FORM MUST BE TYPED

SIDE ONE

COPY

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACO-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

API NO. 15- 051-25019-0000

County Ellis

Approx S2 S2 SE NW Sec. 2 Twp. 11 Rge. 19 E / X W

2560 Feet from /N (circle one) Line of Section

1850 Feet from /W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:
NE, SE, (NW) or SW (circle one)

Lease Name Teet-Bill Well # 1-2

Field Name

Producing Formation Topeka/Kansas City

Elevation: Ground 2085' KB 2090'

Total Depth 3700' PBTD

Amount of Surface Pipe Set and Cemented at 219 Feet

Multiple Stage Cementing Collar Used? X Yes ____ No

If yes, show depth set 1342 Feet

If Alternate II completion, cement circulated from 1342

feet depth to surface w/ 200 sx cmt.

Drilling Fluid Management Plan AH 2, 7-11-00 CC
(Data must be collected from the Reserve Pit)

Chloride content 4000 ppm Fluid volume 500 bbls

Dewatering method used Evaporation

Location of fluid disposal if hauled offsite:

Operator Name

Lease Name License No.

Quarter Sec. Twp. S Rng. E/W

County Docket No.

Operator: License # 5663

Name: Hess Oil Company

Address P. O. Box 1009

City/State/Zip McPherson, KS 67460

Purchaser: Cooperative Refining, LLC

Operator Contact Person: Bryan Hess

Phone (316) 241-4640

Contractor: Name: Murfin Drilling Company, Inc.

License: 30606

Wellsite Geologist: James C. Hess

Designate **Type of Completion**
X New Well ____ Re-Entry ____ Workover

X Oil ____ SWD ____ SIOW ____ Temp. Abd.
____ Gas ____ ENHR ____ SIGW
____ Dry ____ Other (Core, WSW, Expl., Cathodic, etc)

If Workover:

Operator:

Well Name:

Comp. Date Old Total Depth

____ Deepening ____ Re-perf. ____ Conv. to Inj/SWD
____ Plug Back PBTD
____ Commingled Docket No.
____ Dual Completion Docket No.
____ Other (SWD or Inj?) Docket No.

1-20-00 Spud Date | 1-30-00 Date Reached TD | 2-22-00 Completion Date

RECEIVED
STATE CORPORATION COMMISSION
MAY 19 2000
CONSERVATION DIVISION
Wichita, Kansas

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). **One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED.** Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature Dick Hess

Title Dick Hess, President Date 5-17-00

Subscribed and sworn to before me this 17th day of May, 2000.

Notary Public Bryan K. Hess

Date Commission Expires NOTARY PUBLIC - State of Kansas BRYAN K. HESS My Appt. Exp. 5-26-01

K.C.C. OFFICE USE ONLY
F ____ Letter of Confidentiality Attached
C ✓ Wireline Log Received
C ✓ Geologist Report Received

Distribution
✓ KCC ____ SWD/Rep ____ NGPA
____ KGS ____ Plug ✓ Other (Specify)
IOG

Form ACO-1 (7-91)

SIDE TWO

86893

Operator Name Hess Oil Company Lease Name Teet-Bill Well # 1-2

Sec. 2 Twp. 11 Rge. 19 ☐ East ☒ West County Ellis

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken (Attach Additional Sheets.) ☒ Yes ☐ No

Samples Sent to Geological Survey ☐ Yes ☒ No

Cores Taken ☐ Yes ☒ No

Electric Log Run (Submit Copy.) ☒ Yes ☐ No

List All E.Logs Run: Dual Induction
Dual Compensated Porosity
Borehole Compensated Sonic
Microresistivity

☐ Log **Formation (Top), Depth and Datums** ☒ Sample

Name	Top	Datum
Anhydrite	1391'	(+699')
Base Anhydrite	1422'	(+668')
Neva	2482'	(-392')
Topeka	3015'	(-925')
Heebner	3234'	(-1144')
Toronto	3255'	(-1165')
Lansing	3278'	(-1188')
Base Kansas City	3495'	(-1405')
Conglomerate	3512'	(-1422')
Simpson Sand	3559'	(-1469')
Arbuckle	3599'	(-1509')
RTD & LTD	3700'	(-1610')

CASING RECORD ☐ New ☒ Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole 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"	20	219'	common	145	3%cc, 2%gel
Production	7-7/8"	5-1/2"	14.5	3692'	Mid-Con 2	165	
	DV-Tool			1342'	and EA-2	200	

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top	Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
___ Perforate					
___ Protect Casing					
___ Plug Back TD					
___ Plug Off Zone					

Shots Per Foot	**PERFORATION RECORD** - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	**Acid, Fracture, Shot, Cement Squeeze Record** (Amount and Kind of Material Used)	Depth
	(See attached)		

TUBING RECORD Size 2-7/8" Set At 3565' Packer At

Liner Run ☐ Yes ☒ No

Date of First, Resumed Production, SWD or Inj. 2-23-00

Producing Method ☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	70	0	25		35

Disposition of Gas:

☐ Vented ☐ Sold ☐ Used on Lease
(If vented, submit ACO-18.)

METHOD OF COMPLETION

☐ Open Hole ☒ Perf. ☐ Dually Comp. ☐ Commingled

☐ Other (Specify) _____

Production Interval

3044'-3492'

HESS OIL COMPANY

COPY

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

ACO-1 Completion Form Attachment

Teet-Bill #1-2
Approx. S2 S2 NW Section 2-11-19W
Ellis County, Kansas

DST #1: 3030'-3057'. 60-45-30-0. Initial flow: Tool slid 7' when opening and then slid 2'more during initial flow. Bled off blow & had surface blow building to ½". Final flow: Very weak surface blow (tool slid another 6"). Rec. 120' slightly oil cut mud (10% oil, 90% mud), 30' slightly oil cut mud (5% oil, 95% mud). IH 1406#, IF 43-83#, ISI 806#, FF 86-94#, FSI —, FH 1396#.

DST #2: 3297'-3362'. 30-45-30-45. Initial flow: Strong blow - bottom of bucket in 90 sec. Initial shut-in: Blow built to bottom of bucket in 7 min. Final flow: Strong blow bottom of bucket in 3 min. Final shut-in: Blow built to bottom of bucket in 8 min. Rec. 1095' gas in pipe, 1575' gassy oil (25% gas, 75% oil). IH 1586#, IF 94-445#, ISI 830#, FF 458-607#, FSI 825#, FH 1540#.

DST #3: 3364'-3410'. 30-60-30-60. Initial flow: Weak ½" blow built to 1-1/4". Initial shut-in: no blow. Final flow: Weak surface blow. Rec. 20' oil specked slightly water cut mud (3% oil, 10% water, 87% mud). IH 1640#, IF 18-25#, ISI 796#, FF 27-31#, FSI 763#, FH 1560#.

DST #4: 3408'-3440'. Missrun – Packer failure

DST #5: 3380'-3440'. 45-60-45-60. Initial flow: Weak ½" blow building to 2-1/4". Final flow: Surface blow building to 1-1/2". Rec. 2' clean oil (100% oil), 60' slightly oil cut mud (15% oil, 85% mud). IH 1673#, IF 36-45#, ISI 915#, FF 52-56#, FSI 770#, FH 1629#.

DST #6: 3444'-3500'. 45-60-45-60. Initial flow: 3/4" blow building to 9". Initial shut-in: Weak surface blow. Final flow: ½" blow building to 7". Final shut-in: Surface blow throughout. Rec. 30' gas in pipe, 30' clean oil, 60' gas cut muddy oil (10% gas, 85% oil, 5% mud), 60' gassy oil & water cut mud (10% gas, 20% oil, 10% water, 60% mud), 115' slightly oil & water cut mud (5% oil, 20% water, 75% mud). IH 1676#, IF 20-87#, ISI 1138#, FF 97-129#, FSI 1129#, FH 1657#.

DST #7: 3494'-3606'. 60-60-60-60. Initial flow: Weak 1" blow surging & building to 5". Final flow: Surface blow building to 4". Rec. 135' clean gassy oil (10% gas, 90% oil), 115' slightly oil cut mud (15% oil, 85% mud). IH 1721#, IF 24-78#, ISI 1248#, FF 85-119#, FSI 1019#, FH 1675#.

DST #8: 3604'-3616'. 30-45-30-45. Initial flow: Strong blow building to bottom of bucket in 40 sec. Initial shut-in: Weak surface blow. Final flow: Strong blow building to bottom of bucket in 90 sec. Final shut-in: No blow. Rec. 2540' salt water, chl - 30,000 ppm. IH 1784#, IF 752-1019#, ISI 1154#, FF 1081-1150#, FSI 1157#, FH 1737#.

Perforated: 3490'-92', 3470'-72', 3424'-26', 3370'-72', 3356'-60', 3338'-40', 3329'-31', 3044'-51'

MCA acid:
3490'-92' and 3470'-72' ..... 350 gal.- twice
3424'-26' ..... 350 gal.
3370'-72' ..... 350 gal.
3370'-72, 3356'-60', 3338'-40', 3329'-31' ..... 600 gal.
3044'-51' ..... 700 gal.

HESS OIL COMPANY

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Wichita, Kansas 67202

(316) 263-2243

TOPEKA 3015 (- 925)

3042-49' KB — Tan, finely crystalline, dense, limestone. Good show of free oil in fair intercrystalline porosity, strong odor, good stain, and a great cut.

DRILL STEM TEST #1 — 3030 to 3057' KB — 27' Anchor

Blow: Tool slid 7' upon openning -- blew down and had a slow build to 3/4". Tool kept sliding so cut test short -- pulled 140% string weight to get loose.

Times: Open 60, Closed 45, Open 15, Closed 0

Recovered: 120' Oil Cut Mud (10% oil, 90% Mud)
30' Oil Cut Mud (5% oil, 95% Mud)

Pressures: IH 1406# IF 73 - 83# ISIP 806#
FH 1396# FF 86 - 94# FSIP ---

3179-82' KB — White, very fine to finely crystalline, dense, limestone. Slight show of free oil in poor intercrystalline porosity, weak cut, no odor, and slight stain.

3200-04' KB — Tan to white, finely crystalline, slightly chalky, limestone. Fair show of free oil in poor intercrystalline porosity, no odor, fair stain, and fair cut.

HEEBNER 3234 (-1144)

TORONTO 3255 (-1165)

LANSING 3278 (-1188)

3308-14' KB — Tan, finely crystalline, limestone. Good show of free oil in poor to fair intercrystalline porosity, fair odor, good stain, and a good cut.

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3324-30' KB — Cream to tan, very fine to finely crystalline, limestone. Fair show of free oil in poor to fair intercrystalline porosity, fair odor, good stain, and a good cut.

3332-38' KB — White to tan, very fine to finely crystalline, dense, limestone. Fair show of free oil in poor to fair intercrystalline porosity, fair odor, fair stain, and a good cut. (some gas bubbles!)

3343-49' KB — White to tan, very fine to finely crystalline, dense, slightly fossiliferous, limestone. Good show of free oil in poor to fair intercrystalline porosity, fair odor, good stain, and a good cut. (some gas bubbles and a few good pieces)

3352-57' KB — Cream to tan, very fine to finely crystalline, dense, slightly fossiliferous, limestone. Good show of free oil in fair intercrystalline porosity, fair odor, good stain, and a good cut.

DRILL STEM TEST #2 — 3297' to 3362' KB — 65' Anchor

Blow: Bottom of bucket 90 sec. 2nd openning -- bottom of bucket in 3 minutes.

Times: Open 30, Closed 45, Open 30, Closed 45

Recovered: 1095' Gas in Pipe
1575' Gas Cut Oil 36'G

Pressures: IH 1586 IF 94-445# ISIP 830#
FH 1540# FF 438 - 607# FSIP 825#

3666-71' KB — Light brown, very fine to finely crystalline, dense, limestone. Good show of free oil in fair intercrystalline porosity, good odor, good stain, and a strong cut. (few gas bubbles)

3376-90' KB — Cream to tan, very fine to finely crystalline, dense, limestone. Weak shows of free oil in poor intercrystalline porosity, no odor, fair stain, and a weak cut.

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DRILL STEM TEST #3 — 3364' to 3410' KB — 46' Anchor

Blow: Slow build to 1¼". 2nd openning -- weak surface blow.

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

Recovered: 20' Oil Cut Mud (2% oil, 98% Mud)

Pressures:					
IH	1640#	IF	18 - 25#	ISIP	796#
FH	1560#	FF	27 - 31#	FSIP	763#

3411-15' KB — White to cream, very finely crystalline, dense, limestone. Weak show of free oil in poor intercrystalline porosity and fair "on-edge" porosity, no odor, weak stain, and a fair cut.

3426-30' KB — White to tan, very fine to finely crystalline, dense, limestone. Fair show of free oil in poor intercrystalline porosity, no odor, fair stain, and a good cut.

DRILL STEM TEST #4 — 3408' to 3440' KB — 32' Anchor

MISRUN --- Packer Failure!

DRILL STEM TEST #5 — 3380' to 3440' KB — 60' Anchor

Blow: Slow build to 2¼". 2nd Openning -- slow build to 1½".

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

Recovered: 2' Clean Oil
60' Oil Cut Mud

Pressures:					
IH	1673#	IF	36 - 45#	ISIP	915#
FH	1629#	FF	52 - 56#	FSIP	770#

3444-51' KB — White, very finely crystalline, dense, limestone. Good show of free oil in poor intercrystalline porosity and fair "vuggy" porosity, fair odor, good stain, and a strong cut. (2 gas bubbles)

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LANSING (cont.)

3453-56' KB	White, very finely crystalline, dense, limestone. Fair show of free oil in poor intercrystalline porosity, weak odor, fair stain, and a good cut.
3460-66' KB	White to tan, very finely crystalline, dense, limestone. Fair show of free oil in poor intercrystalline porosity, weak odor, good stain, and a fair cut.
3470-75' KB	White, finely crystalline, dense, limestone. Good show of free oil in fair to good intercrystalline porosity, strong odor, good stain, and a strong cut.
3488-95' KB	White, very fine to finely crystalline, dense, limestone. Good show of free oil in poor to fair intercrystalline porosity, fair odor, good stain, and a strong cut.

BASE KANSAS CITY 3495 (-1405)

DRILL STEM TEST #6 3444' to 3500' KB 56' Anchor

Blow: Slow build to 9". 2nd openning -- slow build to 7½".

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

Recovered:
30' Gas
30' Clean Oil
60' Gas Cut Oil (10% Gas, 90% Oil)
60' GO&WCM (10% Gas, 20% Oil, 10% W, 60%M)
115' O&WCM (5% Oil, 20% W, 75% M)

Pressures:

IH	1676#	IF	20 - 87#	ISIP	1138#
FH	1657#	FF	97 - 129#	FSIP	1129#

[Note: I estimate production @ 17½ bbls oil & 8 bbls sw/day]

CONGLOMERATE 3512 (-1422)

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CONGLOMERATE (cont.)

3512-18' KB	Cream, finely crystalline, dense, limestone. Weak show of free oil in poor intercrystalline porosity, slight odor, weak stain, and a fair cut.
3522-30' KB	White to tan, very fine to finely crystalline, dense, limestone. Slight show of free oil in poor intercrystalline porosity, no odor, slight stain, and a very weak cut.

SIMPSON SAND 3559 (-1469)

3559-70' KB	Brown, fine to medium grainned, well rounded, fairly sorted, sandstone clusters and loose grains. Good show of free oil in fair intergranular porosity, no odor, heavy stain and a stong cut. (heavy oil!)
3575-81' KB	Brown, fine to medium grainned, well rounded, fairly sorted, sandstone clusters & loose grains. Also lots of brown & V.C. weathered and tripolitic chert. Good shows of heavy free oil in poor intergrannular porosity and some fair "on-edge" porosity in the chert, no odor, lots of heavy stain, and a strong cut.
3583-87' KB	Fair show of free oil in SS clusters and cherts as above -- poor intergrannular and poor "on-edge" porosity.
3591-99' KB	Tan to light green, weathered, tripolitic, chert. Weak to fair shows of heavy free oil in very poor "on-edge" porosity, no odor, fair stain, and a good cut.

ARBUCKLE 3599 (-1509)

3599' to 3606' KB	Tan, fine to medium crystalline, dense, dolomite. Great show of free oil in poor to fair intercrystalline porosity and good "vuggy" porosity, strong odor, great stain and a very strong cut.

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ARBUCKLE (cont.)

DRILL STEM TEST #7 3494' to 3606' KB 112' Anchor

Blow: Slow build to 5". 2nd openning -- slow build to 4"

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

Recovered: 135' Clean Gassy Oil (10% G, 90% O)
115' Oil Cut Mud (15% O, 85% M)

Pressures:					
IH	1721#	IF	24 - 78#	ISIP	1248#
FH	1675#	FF	85 - 119#	FSIP	1019#

3606-16' KB Tan, fine to medium crystalline, dolomite. Great show of free oil in good intercrystalline porosity, strong odor, great stain, and a very strong cut.

DRILL STEM TEST #8 3604' to 3616' KB 12' Anchor

Blow: Bottom of bucket in 40 seconds. 2nd openning -- bottom of bucket in 90 seconds.

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

Recovered: 2540' SW Chlorides = 30,000 ppm

Pressures:					
IH	1784#	IF	752 - 1017#	ISIP	1157#
FH	1737#	FF	1081 - 1150#	FSIP	1157#

3616-30' KB White to tan, finely crystalline, dolomite. Good show of free oil in fair to good intercrystalline porosity, no odor, good stain, and a strong cut.

3630-40' KB White to tan, fine to medium crystalline, dolomite. Good show of free oil in fair intercrystalline porosity, no odor, good stain, and a strong cut.

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ARBUCKLE (cont.)

3640-50' KB	White to tan, fine to medium crystalline, dense, dolomite. Good show of free oil in fair to good intercrystalline porosity, no odor, good stain, and a good cut.
3650-60' KB	White, finely crystalline, dense, dolomite. Weak show of free oil in fair intercrystalline porosity, no odor, fair stain, and a weak cut.
3660-65' KB	White, finely crystalline, dense, dolomite. Slight show of free oil in fair intercrystalline porosity, no odor, slight stain, and a very weak cut. (some heavy tar stain)

ROTARY TOTAL DEPTH 3700 (-1610)

A good set of Dual Induction, Compensated Neutron Density logs were run to help evaluate the well. Also a Borehole Compensated Sonic log was run to recalculate our seismic information. A Microresistivity log was run to help calculate each productive zone.

5½" 14.5# new casing was run and cemented with 200 sx of EA-II expanding cement. A D.V. Tool was set and openned at 1342' KB and cemented with 165sx of Mid-Con 2 cement. 35sx of cement circulated to the surface.

Sincerely,
James C. Hess
Geologist

HESS OIL COMPANY

225 N. Market, Suite 300
Wichita, Kansas 67202

(316) 263-2243

CASING REPORT:

1-30-00 Ran 86 jts of 5½" 14.5# casing w/34' shoe joint. Set casing 8' off bottom.

Cemeted with 200 sx of EA II expanding cement. Plug landed & held 1500#, released pressure and float collar closed & held!

Dropped bomb and openned D.V. Tool @ 1342' KB.

1-31-00 Circulated mud through D.V. Tool for 4 hrs.

Cemented top stage w/165 sx of Mid-Con 2 . 35 sx circulated to pits. Plug down at 3:30am.

Set casing slips and unscrewed landing joint. Screwed in "lucky" cap.

Float Equipment as Follows:

	Guide Shoe & Float Collar	3692' KB
	Plug Retainer	3658' KB
Centralizers:	#1	3658' KB
	#2	3615' KB
	#3	3529' KB
	#4	3486' KB
	#5	3443' KB
	#6	3400' KB
	#7	3357' KB
	#8	3314' KB
	#9	3056' KB
	#10	1427' KB
	Basket	1420' KB
	D.V. Tool	1342' KB

Sincerely,

James C. Hess
Geologist