

Kansas Corporation Commission Oil & Gas Conservation Division

1057234

Form ACO-1

June 2009

Form Must Be Typed

Form must be Signed

All blanks must be Filled

WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #	API No. 15
Name:	Spot Description:
Address 1:	SecTwpS. R 🗌 East 🗌 West
Address 2:	Feet from North / South Line of Section
City: State: Zip:+	Feet from _ East / _ West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	County:
Name:	Lease Name: Well #:
Wellsite Geologist:	Field Name:
Purchaser:	Producing Formation:
Designate Type of Completion:	Elevation: Ground: Kelly Bushing:
New Well Re-Entry Workover	Total Depth: Plug Back Total Depth:
☐ Oil ☐ WSW ☐ SWD ☐ SIOW ☐ Gas ☐ D&A ☐ ENHR ☐ SIGW	Amount of Surface Pipe Set and Cemented at: Feet Multiple Stage Cementing Collar Used? Yes No
Gas GSW GSW Temp. Abd. CM (Coal Bed Methane)	If yes, show depth set: Feet
Cathodic Other (Core, Expl., etc.):	If Alternate II completion, cement circulated from:
If Workover/Re-entry: Old Well Info as follows:	feet depth to: w/ sx cmt.
Operator:	
Well Name:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date: Original Total Depth: Deepening Re-perf. Conv. to ENHR Conv. to SWD Conv. to GSW	Chloride content: ppm Fluid volume: bbls Dewatering method used:
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:
Commingled Permit #:	Operator Name:
Dual Completion Permit #:	Lease Name: License #:
SWD Permit #:	QuarterSecTwpS. R East West
ENHR Permit #:	
GSW Permit #:	County: Permit #:
Spud Date or Date Reached TD Completion Date or Recompletion Date Recompletion Date	

AFFIDAVIT

I am the affiant and I hereby certify that 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.

Submitted Electronically

KCC Office Use ONLY
Letter of Confidentiality Received
Date:
Confidential Release Date:
Wireline Log Received
Geologist Report Received
UIC Distribution
ALT I II Approved by: Date:

Side Two

1057234

Operator Name:				Lease N	lame:			Well #:		
Sec Twp	S. R	East] West	County:						
INSTRUCTIONS: Sh time tool open and clo recovery, and flow rat line Logs surveyed. A	osed, flowing and shu es if gas to surface te	t-in pressures st, along with	s, whether s final chart(s	hut-in press	ure reach	ed static level,	hydrostatic pres	ssures, bottom h	nole temp	erature, fluid
Drill Stem Tests Taker (Attach Additional		Yes	No		Log	g Formation	n (Top), Depth a	nd Datum		Sample
Samples Sent to Geo	logical Survey	Yes	No		Name			Тор		Datum
Cores Taken Electric Log Run Electric Log Submitte (If no, Submit Cop)	d Electronically	☐ Yes ☐ Yes ☐ Yes	No No No							
List All E. Logs Run:										
		Report a		RECORD	New	Used	on, etc.			
Purpose of String	Size Hole Drilled	Size C Set (In	asing	Weig Lbs. /	ht	Setting Depth	Type of Cement	# Sacks Used	, ,,	and Percent additives
		<u> </u> 	DDITIONAL	CEMENTIN	IG / SQUE	EZE RECORD				
Purpose: Perforate Protect Casing Plug Back TD Plug Off Zone	Depth Top Bottom	Type of 0	Cement	# Sacks	Used		Type and	Percent Additives		
Shots Per Foot	PERFORATI Specify	ON RECORD - Footage of Each	Bridge Plug n Interval Peri	s Set/Type forated			cture, Shot, Ceme mount and Kind of N	nt Squeeze Record Material Used)	d 	Depth
TUBING RECORD:	Size:	Set At:		Packer At:		Liner Run:				
							Yes N	0		
Date of First, Resumed	Production, SWD or EN	IHR. Pr	oducing Meth	nod:	g 🗌 G	as Lift C	Other (Explain)			
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Water	BI	ols.	Gas-Oil Ratio		Gravity
DISPOSITI	ON OF GAS:		N	METHOD OF	COMPLET	TION:		PRODUCTIO	ON INTER	VAL:
Vented Solo	Used on Lease		n Hole	Perf.	Dually (nmingled mit ACO-4)			
(11 verneu, 3u	10./	Othe	r (Specify)				I —			

Form	ACO1 - Well Completion
Operator	H & M Petroleum Corporation
Well Name	BETTY THUNDER 8
Doc ID	1057234

Tops

Name	Тор	Datum
ANHYDRITE	2190	+351
ТОРЕКА	3613	-1072
HEEBNER SHALE	3828	-1287
LANSING	3865	-1324
LANSING D	3907	1366
MUNCIE CREEK SHALE	3990	-1449
KANSAS CITY J	4048	-1507
BASE/KANSAS CITY	4098	-1557

JLWEL Federal Tax I.D.# 20-2886107 ING,

& 785-483-2025 785-324-1041

Home Office P.O. Box 32 Russell, KS 67005

No.

)ate 3.77.77 3.7	Twp. Range	County	State	On Location	Finish
· Betry Thundas	Well No.	Location Callerns	of Rulling W	2120 3/45	6)
Contractor WW #10	4	Owner	•		
Type Job Surface		To Quality O	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing		and furnish
121/4	T.D. 220	cementer an	cementer and helper to assist owner or contractor to do work as listed	or contractor to do work as list	work as listed.
csg. 878	Depth 220	Charge H	-M Petroleum		
Tbg. Size	Depth	Street			1.
Tool	Depth	City		State	
Cement Left in Csg. (5	Shoe Joint	The above wa	The above was done to satisfaction and supervision of owner agent or contractor	supervision of owner	agent or contractor.
Meas Line	Displace 138	Cement Amo	Cement Amount Ordered 1656	- 20/15 WO.	20/06/1
EQUIPMENT	MENT.				
umptrk No. Cementer	6.12	Common	5		0
No. Driver	S.C.	Poz. Mix			
, No.		Gel. 3			
JOB SERVICES	& REMARKS	Calcium	2		
Remarks:		Hulls			
Rat Hole		Salt			
Nouse Hole		Flowseal			
Centralizers		Kol-Seal			
Baskets		Mud CLR 48			
J/V or Port Collar		CFL-117 or (or CD110 CAF 38		
85/8 on batton	Est. Crista	tion Sand	•		
MiV1455K 41)3	Marce	Handling /	74		
	1	Mileage			
(2) + Mound	whate!		FLOAT EQUIPMENT	AT .	
		Guide Shoe			
		Centralizer			
		Baskets			
		AFU Inserts			
		Float Shoe			
		Latch Down			
		Pumptrk Charge	arge Surface		
There's	165	Mileage S &		Tax	
	M			Discount	
Signature IMM	Mallall			Total Charge	
0					





Invoice

	-
3/18/2011	DATE
20547	INVOICE #

BILL TO

13570 Meadowgrass Drive Colorado Springs, CO 80921 H & M Petroleum Corporation Suite 120

- Acidizing
- Cement
- Tool Rental

\$	330 581D 583D	575D 579D 402-5 403-5 407-5 407-5 413-5 417-5 419-5 221 281 283 284	P Z	TH
e A		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Net 30 PRICE	TERMS
pprec			REF. #8	Well No.
We Appreciate Your Business!	Swift Multi-Density Standard (MIDCON II) Service Charge Cement Drayage Subtotal Sales Tax Graham County H&N	Mileage - 1 Way Pump Charge - Two-Stage - 4150 Feet 5 1/2" Centralizer 5 1/2" Cement Basket 5 1/2" Insert Float Shoe With Auto Fill 5 1/2" D.V. Tool & Plug Set 5 1/2" Roto Wall Scratcher 5 1/2" Roto Wall Scratcher 5 1/2" Rotating Head Rental Liquid KCL (Clayfix) Mud Flush Flocele Salt Calseal CFR-1 Standard Cement	Betty Thunder). Lease
Busines	lard (MII	Stage - 4150 F t noe With Auto lug Set atcher own Plug & Ba l Rental)	Graham WV DESCRIPTION	County
Sİ	H&M Petroleum, Corp.	Fill	WW Drilling Rig	Contractor
	1,01:		Oil QTY	Well Type
		50 N 11 H 11 H 11 H 12 H 16 H 16 H 16 H 16 H 17 H 17 H 17 H 17 H 18 H 18 H 18 H 18 H 18 H 18 H 18 H 18	_	Well
Total	Sacks Sacks Ton Miles	Miles Job Each Each Each Each Each Each Each Callon(s) Callon(s) Callon(s) Lb(s) Lb(s) Sack(s) Lb(s)	Development	Well Category
	15.00 1.50 1.00 1.00	5.00 1,750.00 65.00 230.00 300.00 2,750.00 40.00 25.00 150.00 1.50 0.15 30.00 4.00	5-1/2" LongString UNIT PRICE	Job Purpose
\$16 346 25	1,000.00 3,750.00T 600.00 1,015.02 15,452.52 893.73	250.00 1,750.00 1,750.00 715.00T 460.00T 300.00T 2,750.00T 200.00T 150.00T 150.00T 150.00T 112.50T 112.50T 210.00T 400.00T	Jason AMOUNT	Operator

Total

\$16,346.25

JOB LOG CHART NO. PETROLEUM 0230 0200 0/2 0/00 0113 8/18 2338 23/7 अ) (६) 2040 0202 288 1920 2322 23/5 0/50 2335 207 77 TIME 1 1 5 (BPM) Ø 6 6 8 6 WELL NO. 385 (BBL) (GAL) とめ 36 かり J S PUMPS 0 LEASE BETTY THUNDER 8 JOB TYPE J LONGSTRING SWIFT Services, Inc. PRESSURE (PSI)
TUBING CASING 300 200 400 1500 8 400 00 00 PLUE DOWN PRESSURE UP RELEASE PRESSURE POCINCULATE 20 BUTTO PIT WASH DUT MIX 22D OPEN D.V. TOOL -DROP DU OPENING JUDG RELEASE PLUE DOWN PRESSURE UP CLOSE DIL Rump XIM DV/1001 RELEASE SIART Pumping WASHOW Tump SODGAL DROP BALL WASH TRINCK 公美 Rump 20 CENTRALIZERS. 31#1,4,6,8,10,12,14,16,18,20,48 2013 BASKETS. THANKS JHOK IT ASON RIDE 4/50 1505× 8A2@ MA 20 860 OCATION CompLETE 100 PLU6 DESCRIPTION OF OPERATION AND MATERIALS BAS Pumping PumpinG LINES M 6h 000 305x CIRCULATE SMD@ 27.30 KCL KCL MUD FLUSH MUD START 74 SAR CIRCILLATE SOAN FLUSH LINES 490 Sur-11.2006 WASH TRUCK DISPLACEMENT DISPLACEMENT LATCHFULGIN SET@4144 15,5pp DATE/8/MAR/ PAGENO TICKET NO. 20547 NO O

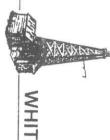
No. 205 HT

TICKET CONTINUATION

Ness City, KS 67560



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WHITEHALL EXPLORATION

WELLSITE GEOLOGICAL CONSULTING

GEOLOGICAL ANALYSIS & WELL REPORT

H & M Petroleum Corp.

BETTY THUNDER No. 8

990' FSL & 100" FEL 230' East of NE-SE-SE Section 31 - Township 9 South - Range 24 West Graham County, Kansas

March 21, 2011

87

GENERAL INFORMATION

Elevation:

G.L. 2,536

K.B. 2,541'

All measurements are from K.B.

Field:

Drilling Contractor/Rig No.:

RTD: 4,150'

LTD: 4,148

WW Drilling/Rig 10

Dreil

Total Depth:

Surface Casing:

Production Casing:

5 1/2"et @ 4,144"

8 5/8" set @ 218'

Drill Time Kept:

3,550'-4,150' RTD

Samples Examined:

3,600'-4,150' RTD

Geological Supervision:

3,550'-4,150' RTD

Wellsite Geologist:

Richard J. Hall

Consulting Wellsite Geologist Certified Petroleum Geologist No. 5820

Drill Stem Tests:

Lansing "A" Zone - Open hole test - Misrun
 Lansing "A" Zone - Open hole test
 Lansing "C"-"D" Zone's - Open hole test
 Lansing "F" Zone - Open hole test

5) Kansas City "H"-"K" Zone's - Open hole test

Morgan Mud/Chemical/Cade Lines

Mud Company/Mud Type/Engineer:

Log-Tech

Electric Logging Company:

Log Suite Run:

-Neutron/Density Porosity -Dual Induction

-Microlog

Sent to Kansas Sample Library, Wichita, KS

Total Depth Formation:

Well Status:

Samples:

Base/Kansas City

and "J" Zones Production casing set to test the Kansas City "I"

DAILY DRILLING CHRONOLOGY

03/19/11	03/18/11	03/17/11	03/16/11	03/15/11	03/14/11	03/13/11	03/12/11	2011 Date
4,150'	4,150°	3,956	3,903	3,860°	2,920	580°	0	7:00 A.M. Depth
0,	194'	53,	43,	940°	2,340'	580°	0	24 Hour Footage
Rig released.	Circulate For Sample (RTD); drop dev. survey, TOOH for logs, RU loggers, run open hole logs (4'), RD loggers, TIH, circ., TOOH laying down drill pipe, rig up csg. crew and run 5 ½" prod. csg., cement csg., DV tool @ 2,695', cement did circ., plug down @ 2:00 A.M., 3/19/11.	Tripping In Hole w/bit; drilling, jet/add premix, drilling, CFS @ 4,018', drilling, CFS @ 4,039', drilling, CFS @ 4,079', TOOH, make up test tool, run DST No. 5, lay down test tool, TIH w/bit, drilling, reach 4,150' RTD @ 6:15 A.M. 3/18/11, CFS.	Circulating For Sample; drilling, CFS @ 3,915', TOOH, make up test tool, TIH, run DST No. 3, TOOH, lay down test tool, TIH w/bit, drilling, CFS @ 3,956', TOOH, make up test tool, TIH, run DST No. 4, TOOH, lay down test tool, TIH w/bit.	Drilling ahead; CFS @ 3,877', 2.25' short trip, circ. 1', drop dev. survey, TOOH-pulling tight, 45 stand short trip (2.25'), circ. 1', TOOH, make up test tool, TIH, run DST 1-misrun (circ. sub pin), TOOH, lay down test tool, make up test tool, TIH, run DST No. 2, TOOH, lay down test tool, TIH w/ bit, drilling, CFS @ 3,903'.	Drilling ahead; jet, drilling, wash section/change rubbers, drilling.	Drilling ahead; jet, drilling, jet, drilling, jet, drilling, jet, drilling, jet, drilling.	MIRU; spud 12 1/4" hole @ 2:00 P.M., drilling to 220°, CFS, drop dev. survey, TOOH, run 5 jts 8 5/8" surf. csg. set @ 218°, cement, WOC 8°, drilling ahead, 1.75° pump repair, drilling.	7:00 A.M. Operation; 24 Hour Activity

DEVIATION SURVEYS

Depth Deviation (Degrees)

3,877 4,150' RTD 220' 0.75 1.75 1.0

REFERENCE WELLS

Reference Well "A":

H & M Petroleum Corp. Betty Thunder No. 777 C-NE-SE

1,980' FSL & 660' FEL

Section 31-T9S-R24W

Graham County, Kansas

KB: 2,545'

RTD: 4,170'

Date Drilled: April, 2010

TD Formation: Base/Kansas City
Status: Lansing/Kansas City "A", "C", "D"

and "K" multi-pay zone oil well

Reference Well "B":

Don E. Pratt

Elmer Dreiling No. 1

SW-SW-SW

Section 32-T9S-R24W

Graham County, Kansas

KB: 2,537'

RTD: 4,115' (no log run)

Date Drilled: June, 1984

TD Formation: Base/Kansas City

Status: Dry and Abandoned

FORMATION TOPS

	Betty	Thunder	No. 8	Betty Thunder No. 777	Elmer Dreiling No. 1						
FORMATION	SAMPLE]	LOG	REFERENCE	REFERENCE	REFERENCE	I	DIFFERENCE T	ENCE TO		
	TOPS	TOPS	DATUM	WELL "A"	WELL "B"	WELL "C"	WELL "A"	WELL "B"	WELL "C"		

PERMIAN											
Anhydrite	2194	2190	+351	+346	NA		+5	NA			
PENNSYLVANIAN											
Topeka	3615	3613	-1072	-1064	-1074		-8	+2			
Heebner Shale	3833	3828	-1287	-1283	-1289		-4	+2			
Lansing	3869	3865	-1324	-1320	-1327		-4	+3			
Lansing "D" Zone	3908	3907	-1366	-1358	NA		-8	NA			
Muncie Creek Shale	3994	3990	-1449	-1444	NA		-5	NA			
Kansas 'J' Zone	4050	4048	-1507	-1502	NA		-5	NA			
Base/Kansas City	4099	4098	-1557	-1553	-1556		-4	-1			

ZONES OF INTEREST

Formation Log Depth

Lansing "F" 3,948'-3,956'

Lithologic & Show Descriptions, Remarks

Limestone, off white-buff, fine crystalline-very chalky, very good grain stone development, firmsoft, rare shell fossil fragment, slight vug development, good inter-granular porosity in part to poor chalky porosity in part, VERY GOOD SHOW: good odor, good bright yellow fluorescence, good near saturated brown-black oil stain, very good show free light brown oil droplets/break, abundant floating medium brown free oil droplets in sample tray, slow streaming live cut, grading to medium milky cut, good bright gold dried ring fluorescence.

Drill Stem Test No. 4 isolated the Lansing "F" Zone and recovered 175 feet of total fluid consisting of: 15 feet of free oil (39 degree API gravity), 70' of slightly oil cut mud (5% oil, 95% mud), and 90 feet of very slightly oil cut muddy water (1% oil, 69% water, 30% mud) with flow pressures of 14-71 and 76-95 p.s.i. and shut-in pressures of 604-604 p.s.i.

Log-Tech open hole logs show this well developed reservoir has a clean-very clean gamma ray signature, excellent SP development, maximum 20% neutron porosity, maximum 18% density porosity, very good microlog development throughout the zone, and has a wet signature with maximum deep resistivity of 4-8 ohms.

Limestone, light gray in part-predominately tan to light brown, fine crystalline with some very fine crystalline, slight-moderately chalky, occasional fossil fragments, fair-intermediate inter-crystalline porosity in part, tight-micritic in part, GOOD SHOW: even/near saturated brown oil stain, slight show disseminated free oil/break, bleeding brown oil droplets, good show free oil, intermediate live streaming cut, grading to very good milky cut, good dried yellow-gold halo fluorescence.

The Kansas City "I" Formation was included on Drill Stem Test No. 5 which tested the Kansas City "H" through "K" Zone's, and recovered 530 gas in pipe and 250 feet of fluid consisting of heavy gassy oil cut mud (20% gas, 30% oil, 50% mud) with flow

Kansas City "I"

4,029'-4,037

Kansas City "J"

4,048'-4,052'

pressures of 70-118 and 136-150 p.s.i. and shut-in pressures of 957-1,041 (still building) p.s.i.

Log-Tech open hole logs show this formation has a clean gamma ray signature, fair SP development, maximum 12% neutron porosity, maximum 12% density porosity, microlog development throughout the zone, and has a maximum deep resistivity of 25 ohms.

Limestone, light gray, very fine crystalline with some micro crystalline, dense, moderately to very oolitic, good calcite cementing, poor intercrystalline porosity in part; scattered good fine crystalline grain stone development in part, some pieces off-white-very chalky with spotted dark brown oil stain throughout, scattered black spotty asphaltic stain in part, VERY GOOD SHOW: slight odor, spotty pin point fluorescence, uneven dark brown oil stain, slight free brown oil droplets, good show bleeding dark brown oil droplets, good show floating free oil droplets in sample tray, fast streaming live cut/near immediate milky cut, very good yellow/gold dried halo fluorescence.

The Kansas City "J" Formation was included on Drill Stem Test No. 5 which tested the Kansas City "H" through "K" Zone's, and recovered 530 gas in pipe and 250 feet of fluid consisting of heavy gassy oil cut mud (20% gas, 30% oil, 50% mud) with flow pressures of 70-118 and 136-150 p.s.i. and shut-in pressures of 957-1,041 (still building) p.s.i.

Log-Tech open hole logs show this formation has a well developed reservoir with a very clean gamma ray signature, intermediate-good SP development, maximum 20+% neutron porosity, maximum 13% density porosity, 4 feet of very good microlog development (4,048°-4,052°), and has a maximum deep resistivity of 30+ ohms.

Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichita, KS 67202-3802



Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Sam Brownback, Governor

Mark Sievers, Chairman Ward Loyd, Commissioner Thomas E. Wright, Commissioner

June 06, 2011

Shane Boillot H & M Petroleum Corporation 13570 MEADOWGRASS DR STE 120 COLORADO SPGS, CO 80921

Re: ACO1 API 15-065-23724-00-00 BETTY THUNDER 8 SE/4 Sec.31-09S-24W Graham County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully, Shane Boillot