CONFIDENTIA

H&M PETROLEUM CORPORATION

Re-Entry

☐ SWD

□ ENHR

☐ GSW

Original Total Depth: _

Plug Back Total Depth

10/03/10

Completion Date or

Recompletion Date

Conv. to ENHR

Conv. to GSW

Permit #:

Permit #:

Permit #:

Permit #: ,

Permit #:

City: COLORADO SPRINGS State: CO Zip: 80921 SHANE BOILLOT

13570 MEADOWGRASS DRIVE SUITE 120

OPERATOR: License #__34055

Address 1: Address 2:

Contact Person: _

CONTRACTOR: License # WW DRILLING

Designate Type of Completion:

CM (Coal Bed Methane)

New Well

V Oil

Gas

☐ og

Operator: _ Well Name:

Original Comp. Date: _

Deepening

Plug Back:

Commingled

SWD

☐ ENHR

☐ GSW

Recompletion Date

9/27/10

Spud Date or

Dual Completion

Wellsite Geologist: CLAYTON ERICKSON

Purchaser: COFFEYVILLE RESOURCES

☐ D&A

Cathodic Other (Core, Expl., etc.): If Workover/Re-entry: Old Well Info as follows:

Re-perf.

10/02/10

Date Reached TD

Kansas Corporation Commission OIL & GAS CONSERVATION DIVISION

Form Must Be Typed Form must be Signed All blanks must be Filled

WELL COMPLETION FORM 5.

CONFIDENTIAL

SIOW

☐ SIGW

Temp. Abd.

Conv. to SWD

Workover

WELL HISTORY - DESCRIPTION OF WELL & LEASE

API No. 15 - 065-23680-00-00	1/29111
Spot Description:	
S2_SW_NW_Sec29_Twp95	S. R. ²⁴ □ East 🕅 West
2,310 Feet from ✓ Nor	
cco .	st / 🗹 West Line of Section
Footages Calculated from Nearest Outside S	_
□NE □NW □SE □S	
County: GRAHAM	
	Well #: 1
Field Name:UNKNOWN	
Producing Formation: LANSING	
Elevation: Ground: 2553 Kelly	Bushing: 2558
Total Depth: 4180 Plug Back Total Dep	- hth:
Amount of Surface Pipe Set and Cemented	
Multiple Stage Cementing Collar Used?	☑ Yes ☐ No
f yes, show depth set: 2214	Feet
f Alternate II completion, cement circulated	from: <u>2214</u>
eet depth to: SURFACE w/ 34	
Orilling Fluid Management Plan (Data must be collected from the Reserve Pit)	
Chloride content: 1000 ppm Flui	
Dewatering method used: EVAPORATION	N
Location of fluid disposal if hauled offsite:	
Operator Name:	
Lease Name:Lice	
QuarterSecTwpS.	
County:Permit #:	
	· · · · · · · · · · · · · · · · · · ·
Kansas Corporation Commission, 130 S. Marsion of a well. Rule 82-3-130, 82-3-106 and ted in writing and submitted with the form (seport shall be attached with this form. ALL C	d 82-3-107 apply. Information see rule 82-3-107 for confiden-

INSTRUCTIONS: An original and two copies of this form shall be filed with Kansas 67202, within 120 days of the spud date, recompletion, workover or o of side two of this form will be held confidential for a period of 12 months if re tiality in excess of 12 months). One copy of all wireline logs and geologist w BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and requlations 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.

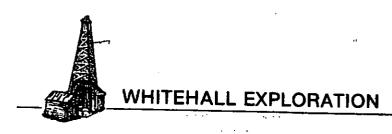
Signature:	1 Rille	/	
Title: LAND MGR		Date:	1/19/11

KCC Office Use ON	RECEIVED	7
Letter of Confidentiality Received Date: 117 11 - 117 1	2	ł
Confidential Release Date:	3 JAN 2 4 201	1
Wireline Log Received Geologist Report Received	KCC WICHIT	Α
UIC Distribution ALT		

Side Two

KCC JAN 2 4 2011

perator Name: H&I	<u>M PETROLEUM</u>	CORPO	RATION	_ Lease	Name: _	BETTY THUN	NDER	Well #:1_		
_{вс.} <u>29</u> тwp. <u>9</u>	s. r. <u>24</u>	East	✓ West	Count	y: <u>GRA</u>	HAM			CC	NFIDENT
STRUCTIONS: She ne tool open and clo covery, and flow rate e Logs surveyed. A	sed, flowing and shes if gas to surface t	ut-in pressi est, along v	ires, whether si vith final chart(s	hut-in pres	ssure read	ched static level,	hydrostatic p	ressures, bottom l	noie temp	erature, fluid
ill Stem Tests Taken (Attach Additional S		₹ Ye	es No		⊘ L	og Formatio	n (Top), Dept	h and Datum		Sample
•	,				Nam	e		Тор	1	Datum
mples Sent to Geol	ogical Survey		_		ANHY	DRITE		2255		333
res Taken etric Log Run		∐ Ye ☑ Ye			TOPE			3642		084
ctric Log Submitted	•	<u> </u>			HEEB			3862		304
(If no, Submit Copy,)				LANS			3897		339
All E. Logs Run:					1	ING D		3937		379
I, MICRO, NI	EUTRON/DE	NSITY,	SONIC		ŀ	CIE CREEK		4024		466
						KC BASE		4078/4128	-1	520/-1570
		Repo		RECORD conductor, s	✓ Ne surface, inte	w Used ermediate, producti	ion. etc.			
Purpose of String	Size Hole Drilled	Siz	e Casing (In O.D.)	We	ight / Ft.	Setting Depth	Type of Cement			and Percent
URFACE	12 1/4	8 5/8		23#		233	COMMON			/ 2% GELL
RODUCTION	7 7/8	5 1/2		15.5#		4184	COMMON	l 345	10%SAL	1/5%GILSONITE
				,,					<u> </u>	
	5-4	Т.	ADDITIONAL	CEMENT	ING / SQL	JEEZE RECORD				
Purpose: Perforate	Depth Top Bottom	Туре	of Cement	# Sack	s Used		Туре	and Percent Additives	3	
Protect Casing Plug Back TD										
Plug Off Zone										
						<u> </u>				
Shots Per Foot			D - Bridge Plug Each Interval Per					ement Squeeze Reco of Material Used)	rd	Depth
	3928-3930					SHOT				3930
	3938-3942					SHOT				3942
	4079-4082					SHOT				4082
				···		<u> </u>			RF	CEIVED
UBING RECORD:	Size:	Set At:		Packer	At:	Liner Run:		a		2 4 2011
	7/8	2214		3550		<u> </u>	Yes	/ No	JAI	1 4 7 2011
ate of First, Resumed	Production, SWD or E	NHR.	Producing Meth Flowing	nod: Pumpi	ng 🗀	Gas Lift C	Other <i>(Explain</i>) .		KCC	WICHITA
stimated Production Per 24 Hours	Oii 80	Bbls.	Gas 0	Mcf	Wat	er B	bls.	Gas-Oil Ratio		Gravity 36.8
DISPOSITIO	ON OF GAS:			METHOD O	F COMPLE	ETION:		PRODUCTI	ON INTER	IVAL:
Vented Sold	<u> </u>	, 🗀 (Perf.	Dually	Comp. Cor	mmingled	3938-3942		
(If vented, Sub	ســـا	1 _	Other (Specify)		(Submit		mit ACO-4)		• • • • •	



WELLSITE GEOLOGICAL CONSULTING

GEOLOGICAL ANALYSIS & WELL REPORT

H & M Petroleum Corporation

BETTY THUNDER No. 1

2,310' FNL & 660' FWL C-S/2-SW-NW Section 29-Township 9 South-Range 24 West Graham County, Kansas

October 14, 2010

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GENERAL INFORMATION

Elevation:

Well Status:

All measurements are from K.B. Field: Wildcat Drilling Contractor/Rig No.: WW Drilling/Rig 6 Total Depth: RTD: 4,180' LTD: 4,185' Surface Casing: 8 5/8" set @ 233' **Production Casing:** 5 1/2" set @ 4,178' Drill Time Kept: 3,575'-4,180' RTD Samples Examined: 3,600'-4,180' RTD Geological Supervision: 3,575'-4,180' RTD Wellsite Geologist: Clayton Erickson Consulting Wellsite Geologist-Loomis, Nebraska Drill Stem Tests: 1) Lansing "C"-"D" Zone's - Open hole test 2) Kansas City "I"-"J" Zone's - Open hole test Mud Company/Mud Type/Engineer: Morgan Mud/Chemical/Dave Lines Electric Logging Company: Log-Tech Log Suite Run: -Dual Induction -Micro Log RECEIVED -Neutron/Density Porosity -Sonic JAN-2 4 2011 Samples: Examined & discarded KCC WICHITA Total Depth Formation: Base/Kansas City

Production casing set to further test several Lansing/Kansas City Group Zone's

G.L. 2,553'

K.B. 2,558'

DAILY DRILLING CHRONOLOGY

2010 <u>Date</u>	7:00 A.M. <u>Depth</u>	24 Hour <u>Footage</u>	7:00 A.M. Operation; 24 Hour Activity
09/27/10	0	0	MIRU; spud @ 2:30 P.M., drilling to 234', circ., TOOH, run 5 jts 8 5/8" 20# surf. csg. set @ 233', cement csg. w/160 sx-plug down @ 6:45 P.M., Wait On Cement 8', TIH w/ bit, drill out @ 2:45 A.M9/28/10, drilling.
09/28/10	780'	780'	Drilling ahead; jet, drilling, jet, drilling, jet, drilling.
09/29/10	2,765'	1,985'	Drilling ahead; jet, drilling, jet, drilling, jet and displace hole @ 2,987' (660 bbls), drilling, jet, drilling.
09/30/10	3,495'	730'	Drilling ahead; CFS @ 3,915', drilling, CFS @ 3,935', drilling, CFS @ 3,950', short trip 37 stands (3.5 hrs), circ. 1', drop dev. survey and TOOH strapping pipe (0.36' short), pick up test tool, TIH, running DST #1.
10/01/10	3,950'	455'	Running DST No. 1; TOOH, lay down test tool, TIH w/bit, drilling, CFS @ 3,985', drilling, CFS @ 4,045', drilling, CFS @ 4,063', drilling, CFS @ 4,085'.
10/02/10	4,085'	135'	Circulate For Sample (CFS); TOOH, pick up test tool, TIH, run DST #2, run DST No. 2; TOOH, lay down test tool, TIH w/bit, drilling, CFS @ 4,105', drilling, reach 4,180' RTD @ 9:15 P.M., short trip, circ. 1', TOOH, rig up loggers.
10/03/10	4,180'	95'	Running Log-Tech open hole logs; (7:00-11:45 A.M.), rig down loggers, TIH w/collars-lay down collars, TIH w/ drill pipe, circ., TOOH laying down drill pipe, rig up and run 5 ½" prod. csg. set @ 4,178'-did not land, cement csg w/160 sxplug down @ 11:45 P.M., rig released @ 1:45 A.M10/04/10.

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DEVIATION SURVEYS

<u>Depth</u>	Deviation (Degrees)
234'	0.50
3,950'	0.75
4,180'	0.75

REFERENCE WELLS

Reference Well "A":

J. A. Terteling & Sons

Petett Heirs No. 1

SW-NW-SW

Section 29-T9S-R24W Graham County, Kansas

KB: 2,558' RTD: 4,160'

Date Drilled: April, 1962

TD Formation: Base/Kansas City

Status: Dry & Abandoned (1 DST run-tight)

Reference Well "B":

Don E. Pratt

Englebert No. 1 NE-SE-NW

Section 29-T9S-R24W Graham County, Kansas

KB: 2,534' RTD: 3,890'

Date Drilled: May, 1962

TD Formation: Base/Kansas City

Status: Dry & Abandoned (No Log run, No DST)

Reference Well "C":

Don E. Pratt

J. C. No. 1 C-NE/4

Section 30-T9S-R24W

Graham County, Kansas

KB: 2,579' RTD: 4,140'

Date Drilled: October, 1976

TD Formation: Base/Kansas City

Status: Dry & Abandoned (3 DST's-all recovered saltwater)

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FORMATION TOPS

	BETTY	THUND	ER No. 1	Petett Heirs No. 1	Englebart No. 1	J.C. No. 1			
FORMATION	SAMPLE	1	LOG	REFERENCE	REFERENCE	REFERENCE	D	IFFERENCE T	0
	TOPS	TOPS	DATUM	WELL "A"	WELL "B"	WELL "C"	WELL "A"	WELL "B"	WELL "C"
PERMIAN									
Stone Corral Anhydrite	2219	2255	+333	+330	+331	NA	+3	+2	NA
PENNSYLVANIAN									
Topeka	3640	3642	-1084	NA	-1097	NA	NA	+13	NA
Heebner Shale	3858	3862	-1304	-1308	-1315	-1307	+4	+11	+3
Lansing "A"	3894	3897	-1339	-1342	-1356	-1344	+3	+17	+5
Lansing "D"	3934	3937	-1379	-1388	NDE	NA	+9	NA	NA
Muncie Creek Shale	4021	4024	-1466	-1469	NDE	NA	+3	NA	NA
Kansas City "J"	NA	4078	-1520	-1524	NDE	NA	+4	NA	NA
Base/Kansas City	4124	4128	-1570	-1574	NDE	NA	+4	NA NA	NA

ZONES OF INTEREST

<u>Formation</u>	Log Depth	Lithologic & Show Descriptions, Remarks
Lansing "C"	3,926'-3,930'	Limestone, white-cream, fine crystalline grain stone development, common white-orange chert, poor pin point porosity with rare fine inter-granular porosity, INTERMEDIATE SHOW: faint odor, poor show free oil on break, several oil droplets in water. The Lansing "C" Zone was included on DST No. 1 which covered the Lansing "C"-"D" Zone's and on a 60 minute total flow period recovered 450 feet of: gas in pipe and 300 feet of total fluid consisting of 135 feet of clean gassy oil (20% gas, 80% oil), and 165 feet of gassy mud cut oil (10% gas, 60% oil, 30% mud), with flow pressures of 38-82 and 90-121 p.s.i. and shut in pressures of 768-768 p.s.i. (Oil = 36 degrees API Gravity). Log-Tech logs show this zone has a very clean gamma ray signature, poor SP development, 4.5-10% neutron porosity, 5-10% density porosity, 5-13% sonic porosity, 1 foot of well developed microlog, and has a maximum 27 ohms deep resistivity.
Lansing "D"	3,937'-3,942'	Limestone, white-cream, fine crystalline grain stone development, poor pin point to good intergranular porosity, INTERMEDIATE SHOW: fair odor, light brown oil stain, poor show free oil. This zone was included on DST No. 1 which covered the Lansing "C"-"D" Zone's and on a 60 minute total flow period recovered 450 feet of gas in pipe and 300 feet of total fluid consisting of: 135 feet of clean gassy oil (20% gas, 80% oil), and 165 feet of gassy mud cut oil (10% gas, 60% oil, 30% mud), with flow pressures of 38-82 and 90-121 p.s.i. and shut in pressures of 768-768 p.s.i. (Oil = 36 degrees API Gravity). Log-Tech logs show this zone is well developed with a very clean gamma ray signature, good SP development, 4-9% neutron porosity, 5-9% density

deep resistivity.

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porosity, 5-12% sonic porosity, 2+ feet of very well developed microlog, and has a maximum 20 ohms

Kansas City "I" 4,060'-4,067'

Limestone, white-cream, predominately fine crystalline grain stone development, slightly chalky, poor-trace fair pin point porosity, GOOD SHOW: fair odor, saturated light brown oil stain, poor-fair show free oil on break.

This zone was included on DST No. 2 which tested the Kansas City "I"-"J" Zone's and recovered 310 feet of gas in pipe and 145 feet of total fluid consisting of: 15 feet of clean gassy oil (10% gas, 90% oil), 130 feet of gassy oil cut mud (5% gas, 40% oil, 55% mud), with flow pressures of 21-36 and 44-70 p.s.i. and shut in pressures of 1,340-1,346 p.s.i. (Oil = 34 degrees API Gravity).

Log-Tech logs show this zone has a very clean gamma ray signature, no SP development, maximum 6-9% neutron porosity, maximum 5% density porosity, 7-17% sonic porosity, moderate microlog development, and has a maximum 19 ohms deep resistivity.

Kansas City "J" 4,078'-4,082'

Limestone, white-cream, fine crystalline grain stone development, poor-fair inter-granular porosity, FAIR SHOW: fair odor, saturated light brown oil stain, poor-fair show free oil/ break, floating oil droplets on water.

This zone was included on DST No. 2 which tested the Kansas City "I"-"J" Zone's and recovered 310 feet of gas in pipe and 145 feet of total fluid consisting of: 15 feet of clean gassy oil (10% gas, 90% oil), 130 feet of gassy oil cut mud (5% gas, 40% oil, 55% mud), with flow pressures of 21-36 and 44-70 p.s.i. and shut in pressures of 1,340-1,346 p.s.i. (Oil = 34 degrees API Gravity).

Log Tech Logs show this zone is a well developed reservoir with a very clean gamma ray signature, good SP development, maximum 16% neutron porosity, maximum 9% density porosity, maximum 17% sonic porosity, 4 feet of well developed microlog, and has a maximum 15 ohms deep resistivity over this interval.

JAN 2 4 2011
KCC WICHITA

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DRILL STEM TEST REPORT

H&M Petroleum Corp

Betty Thunder # 1

13570 Meadow grass Dr Ste 101 Colorado Springs Co 80921

29-9-24-Graham-Ks Job Ticket: 040354

DST#: 1

ATTN: David Allen

Test Start: 2010.10.01 @ 11:35:06

GENERAL INFORMATION:

Formation:

C-D

LKC

Deviated:

Νo Whipstock:

ft (KB)

Test Type: Conventional Bottom Hole

Time Tool Opened: 13:32:21

Time Test Ended: 17:58:51

Tester:

Dan Bangle

38

interval;

3912.00 ft (KB) To 3950.00 ft (KB) (TVD)

Unit No:

Total Depth:

Reference Elevations:

2558.00 ft (KB)

3950.00 ft (KB) (TVD)

KB to GR/CF:

2553.00 ft (CF)

Hole Diameter:

7.88 inches Hole Condition: Good

5.00 ft

Serial #: 8653

Press@RunDepth:

psig @

ft (KB)

Capacity:

8000.00 psig

Start Date:

2010.10.01

End Date:

2010.10.01

Last Calib.:

2010.10.01

Start Time:

11:35:30

End Time:

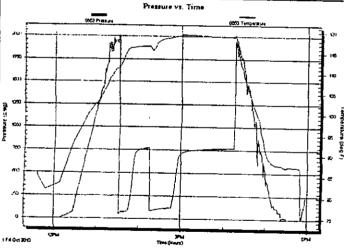
17:58:00

Time On Btm: Time Off Btm:

TEST COMMENT: F-Strong B-B in 9 min

ISI-Weak steady surface blow FF-Strong B-B in 9 min

FSI-Weak building to 2 1/2" died in 90 min



		PI	RESSUR	RE SUMMARY
Ú)	Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
Temperature (deg f)	15" 15 30" 45 90 45"135 70" 220 221	1990 38 82 768 90 121 768 1912	(ueg r)	IHP IFP IFP-END ISIP FFP FFP-END FSIP EHP
3		}		

Length (ft)	Description	Volume (bbf)
165.00	OCGsyM 10%g 60%o 30%m	1.18
135.00	CGsyO 20%g 80%o	1.89
0.00	450 GIP	0.00
	i	

Gas Rates

Choke (inches) Pressure (psig)

Gas Rate (Mcf/d)

Trilobite Testing, Inc.

Ref. No: 040354

Printed: 2010.10.01 @ 18:11:12

RECEIVED

JAN 2 4 2011



DRILL STEM TEST REPORT

H&M Petroleum Corp

ATTN: David Allen

Betty Thunder # 1

13570 Meadow grass Dr Ste 101 Colorado Springs Co 80921

29-9-24-Graham-Ks

Job Ticket: 040355

DST#:2

Test Start: 2010.10.02 @ 09:33:04

GENERAL INFORMATION:

Formation:

Interval:

I-J

LKC

Deviated:

Time Test Ended: 16:40:34

No Whipstock: Time Tool Opened: 11:25:19

ft (KB)

Test Type: Conventional Bottom Hole

Tester:

Dan Bangle

Unit No:

38

Reference Elevations:

2558.00 ft (KB)

KB to GR/CF:

2553.00 ft (CF) 5.00 ft

Total Depth: Hole Diameter: 4042.00 ft (KB) To 4085.00 ft (KB) (TVD)

4085.00 ft (KB) (TVD)

7.88 inches Hole Condition: Good

Press@RunDepth: Start Date:

Serial #: 8354 Inside

69.82 psig @

4043.00 ft (KB)

End Date:

2010,10.02

Capacity: Last Calib.: 8000.00 psig

Start Time:

2010.10.02 09:33:05

End Time:

16:40:34

Time On Btm:

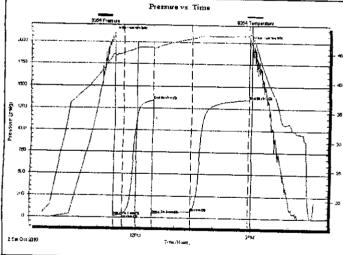
2010.10.02 2010.10.02 @ 11:25:04

Time Off Btm:

2010.10.02 @ 14:57:49

TEST COMMENT: IF-Weak building to 2"

FF-Strong B-B in 20 min FSI-Weak blow died in 10 min



_					
		Р	RESSUR	RE SUMMARY	
	Time	Pressure	Temp	Annotation	
	(Min.)	(psig)	(deg C)		
6	0	2090.78	44.86	Initial Hydro-static	
	1	21.20	44.54	Open To How (1)	
D	15" 14	35.94	44.98	Shut-In(1)	
7	45" 61	1339.99	46.00	End Shut-In(1)	
5750072	61	44.07	45.77	Open To Flow (2)	
ar a	60" 121	69.82	47.53	Shut-In(2)	
Temperature (deg C)	90" 211	1348.61	48.05	End Shut-In(2)	
	213	1995.21	48.28	Final Hydro-static	
`	,				
			- 1		
ļ	-		- 1		
1	1		1		

Recovery

Length (ft)	Description	Volume (bbl)
130.00	MCGsyO 5%g 40%o 55%m	0.69
15.00	CGsyO 10%g 90%o	0.21
0.00	310 GIP	0.00
	<u> </u>	

Gas Rates

Choke (inches) Pressure (psig) Gas Rate (Mcf/d)

Trilobite Testing, Inc.

Ref. No: 040355

Printed: 2010.10.02 @ 18:26:13 Page 1

SUMMARY

The Betty Thunder Prospect is located in southwestern Graham County, Kansas where prolific commercial oil production occurs from the multiple pay zone Pennsylvanian aged Lansing/Kansas City Group. The prospect is surrounded by mature Lansing/Kansas City Group oil fields including the 1,000,000+ BO Hoeting Field, Dreil Field (269,000 BO), the Dreil SW Field (315,000 BO), and the Riedel North Field (292,000 BO).

The Betty Thunder No. 1 test well is located approximately 9.5 miles west and 9 miles south of Hill City, Kansas.

The Betty Thunder Prospect was originally defined through subsurface structure and isopach (thickness) mapping from existing well control. A 2.25 square mile 3-D seismic survey was shot over the prospect leasehold which defined two prominent structural features. The Betty Thunder No. 1 wildcat well tested the northern moderate relief structural closure, at the Lansing datum, which trends northeast-southwest, and is located in the SW-NW/4 of Section 29-T9S-R24W. Also, a 3-D isochron map from the Stone Corral Anhydrite to Lansing indicates significant thinning at this location.

Several dry and abandoned wells surround the Betty Thunder No. 1 location and are used for correlation as Reference Well's for this report. Compared to Reference Well "A"/J. A. Terteling Petett Heirs No. 1 (SW-NW-SW-Section 29-T9S-R24W), Reference Well "B"/Don E. Pratt Englebert No. 1 (NE-SE-NW-Section 29-T9S-R24W), and Reference Well "C"/Don E. Pratt J. C. No. 1 (C-NE-Section 30-T9S-R24W), the Betty Thunder No. 1 runs structurally high throughout the well, as predicted by the 3-D seismic.

The primary objectives in the Betty Thunder No. 1 test well included the Lansing "C", "D" and "F" Zone's and the Kansas City "J" and "K" Zone's. Secondary objectives included the Lansing "A" and "E" Zone's and the Kansas City "H", "I" and "L" Zone's.

Two (2) open hole drill stem test's were run during the drilling of the Betty Thunder No. 1, based on visual oil shows and associated rate of penetration drilling breaks. DST No. 1 covered the Lansing "C"-"D" Zone's, and recovered 450 feet of gas in pipe, 135 feet of clean gassy oil and 165 feet of gassy mud cut oil (10% gas, 30% mud, 60% oil, no water) with shut in pressures of 768-768 p.s.i. DST No. 2 covered the Kansas City "I"-"J" Zone's, and recovered 310 feet of gas in pipe, 15 feet of clean gassy oil and 130 feet of gassy oil cut mud (5% gas, 40% oil, 55% mud, no water) with shut in pressures of 1,339-1,348 p.s.i.

The Betty Thunder No. 1 well was spudded on October 27, 2010, and the rig was released on November 3, 2010 after production casing was set. No significant drilling problems were encountered during the drilling of this well.

The well was under 24-hour geological supervision from 3,575 feet to 4,180 feet RTD. Wet and dry drilling samples were caught by the drilling crews from 3,600 feet to 4,180 feet

RTD at 10-foot intervals. All lithologic descriptions were lagged to true depth by the consulting wellsite geologist.

Hydrocarbon Shows

Several significant free live oil sample shows were observed and recorded in the samples during the drilling of the Betty thunder No. 1 in the primary and secondary objective Lansing/Kansas City Group:

-Lansing "A" Zone:

Fair Show:

spotty-uneven light brown oil stain,

fair show free oil (this zone was not

drill stem tested)

-Lansing "C" Zone:

Intermediate Show:

faint odor, brown oil stain, poor show free oil, several floating oil droplets (this zone was included on DST No. 1 which covered the Lansing "C"-"D" Zone's and recovered 450' GIP, 135' clean gassy oil (20% gas, 80% oil) and 165' gassy mud cut oil (10% gas, 60% oil, 30% mud) with shut in pressures of

768-768 p.s.i.

-Lansing "D" Zone:

Intermediate Show:

fair odor, saturated light brown oil stain, poor show free oil (this Zone was included on DST No. 1 which covered the Lansing "C"-"D" Zone's and recovered 450' GIP, 135' clean gassy oil (20% gas, 80% oil) and 165' gassy mud cut oil (10% gas, 60% oil, 30% mud) with shut in

pressures of 768-768 p.s.i.

-Lansing "F" Zone:

Good Show:

good odor, scattered oil stain, poor show free oil, floating oil droplets (this zone was not drill stem tested)

-Kansas City "H" Zone:

Poor Show:

light brown oil stain (this zone was

not drill stem tested)

-Kansas City "I" Zone:

Good Show:

fair odor, saturated light brown oil stain, poor-fair show free oil (this Zone was included on DST No. 2 which tested the Kansas City "I"-

"J" Zone's and recovered 310' GIP,

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15' clean gassy oil and 130' of gassy oil cut mud (5% gas, 40% oil, 55% mud) with shut in pressures of 1,340-1,349 p.s.i.

-Kansas City "J" Zone:

Good Show:

fair odor, light brown saturated oil stain, poor-fair show free oil, floating oil droplets, grading to scattered asphaltic oil stain (this Zone was included on DST No. 2 which tested the Kansas City "I"-"J" Zone's and recovered 310' GIP, 15' clean gassy oil and 130' of gassy oil cut mud (5% gas, 40% oil, 55% mud) with shut in pressures of 1,340-1,349 p.s.i.

-Kansas City "K" Zone:

Intermediate Show:

very faint odor, scattered black asphaltic stain, rare good show free oil (this zone was not drill stem tested)

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There were no observed sample hydrocarbon shows recorded in the Topeka or Toronto Formation's, Lansing "A", "E", or "G" Zone's, or the Kansas City "L" Zone.

Complete lithologic descriptions and hydrocarbon sample shows can be found in the detailed "Zones of Interest" portion of this geologic report. Complete Drill Stem Test fluid recovery results and pressures can be found in this report under "Drill Stem Tests".

Structural Position

As the 3-D seismic correctly predicted, the Betty Thunder No. 1 runs structurally high throughout the well relative to the three Reference Well's.

Compared to Reference Well "A"/J. A. Terteling Petett Heirs No. 1 (SW-NW-SW-Section 29-T9S-R24W), the Betty Thunder No. 1 runs: +3 feet high at the Stone Corral Anhydrite, +4 feet high at the Heebner Shale, +3 feet high at the Top/Lansing "A", +3 feet high at the Muncie Creek Shale, +4 feet high at the Kansas City "J" Zone, and +4 feet high at the Base/Kansas City.

Compared to Reference Well "B"/Don E. Pratt Englebert No. 1 (NE-SE-NW-Section 29-T9S-R24W), the Betty Thunder No. 1 runs: +2 feet high at the Stone Corral Anhydrite, +11 feet high at the Heebner Shale, and +17 feet high at the Top/Lansing "A" (this dry hole reached total depth in the Upper Lansing).

Compared to Reference Well "C"/Don E. Pratt J. C. No. 1 (C-NE-Section 30-T9S-R24W, the Betty Thunder No. 1 runs: +3 feet high at the Heebner Shale, and +5 feet high at the Top/Lansing "A" (no other formation tops were released on this well).

A complete structural comparison of the Formation Tops in this well, in relation to the Reference Wells, can be found in the detailed "Formation Tops" table in this geologic report.

Conclusion

The Betty Thunder No. 1 wildcat test was based on a 3-D seismic survey interpretation which indicated a moderate relief structural closure at the Lansing datum was located in the SW-NW/4-Section 29-T9S-R24W.

Numerous free oil sample shows were observed in the Lansing "C", "D", and "F" Zone's and the Kansas City "I", "J", and "K" Zone's. Two drill stem tests were run over the Lansing "C"-"D" Zone's and the Kansas City "I"-"J" Zone's, both recovering gas in pipe, clean gassy oil and gassy mud cut oil, no water with good-excellent bottom hole pressures.

Therefore, based on the positive fluid recoveries (gas in pipe, clean gassy oil and gassy mud cut oil, no water) and pressure recoveries on Drill Stem Test's No. 1 (Lansing "C"-"F" Zone's) and 2 (Kansas City "I"-"J" Zone's), the favorable positive structural position of the primary objective Lansing/Kansas City Group as confirmed by Log-Tech logs evaluation and analysis, combined with the oil show's and reservoir development observed through sample examination, 5½ inch production casing was set in the Betty Thunder No. 1 to production test the Lansing "D" Zone and the Kansas City "J" Zone. Other potential Lansing/Kansas City Group pay zone's include the "C", "F" and "I" Zone's and should be tested through pipe prior to abandonment.

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Respectfully Submitted,

Richard J. Hall

Certified Petroleum Geologist No. 5829

Whitehall Exploration



TICKET NUMBER LOCATION OOLLOW FOREMAN R+ Hel

PO Box 884, C	ha:	nute,	KS	66720
620-431-9210	OF	800-	467 -	8676

CONFIDENTIAL FORE

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AUTHORIZTION MOLD R

Jan 12 1 02:12p Microsoft OILWELL CEMENTING, INC.

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