



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1253861
OIL & GAS CONSERVATION DIVISION

Form ACO-1
August 2013

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

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

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

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1253861

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems 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 test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> 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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

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

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR: _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Culbreath Oil & Gas Company, Inc.
Well Name	Mense 1-36
Doc ID	1253861

All Electric Logs Run

DIL
CND
Micro
Deviation

Form	ACO1 - Well Completion
Operator	Culbreath Oil & Gas Company, Inc.
Well Name	Mense 1-36
Doc ID	1253861

Tops

Name	Top	Datum
Anhydrite	2450	+463
Base Anhydrite	2479	+434
Topeka	3725	-1028
Heebner	3941	-1028
Lansing	3977	-1064
Muncie Creek	4113	-1200
Stark	4203	-1290
BKC	4263	-1350
Pawnee	4392	1469
Fort Scott	4454	-1541
Cherokee	4483	1570
Miss	4546	-1633

GLOBAL CEMENTING, L.L.C.

1571

REMIT TO 18048 170RD
RUSSELL, KS 67665

SERVICE POINT: Russell, KS

DATE <u>12-20-14</u>	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE <u>Nense</u>	WELL #. <u>1-36</u>	LOCATION			COUNTY	STATE	
OLD OR <input checked="" type="radio"/> NEW (CIRCLE ONE)							

CONTRACTOR WW Drilling

TYPE OF JOB Rotary Plug

HOLE SIZE 7 7/8 T.D.

CASING SIZE DEPTH

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG.

PERFS

DISPLACEMENT

OWNER

CEMENT AMOUNT ORDERED 240 sk 60/40 40/gal

14 # Flt

COMMON _____ @ _____

POZMIX _____ @ _____

GEL _____ @ _____

CHLORIDE _____ @ _____

ASC _____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

HANDLING _____ @ _____

MILEAGE _____ @ _____

TOTAL _____

EQUIPMENT

PUMP TRUCK CEMENTER Heath

P1 HELPER Buel

BULK TRUCK

B3 DRIVER

BULK TRUCK

DRIVER

REMARKS:

1st Plug @ 2400' = 50 sk

2nd Plug @ 1700' = 100 sk

3rd Plug @ 320' = 50 sk

come out of hole and top off with
10 sk BH = 30

CHARGE TO: Culbreath

STREET _____

CITY _____ STATE _____ ZIP _____

Global Cementing, L.L.C.,
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME _____

SIGNATURE [Signature]

SERVICE

DEPTH OF JOB _____

PUMP TRUCK CHARGE _____

EXTRA FOOTAGE _____ @ _____

MILEAGE _____ @ _____

MANIFOLD _____ @ _____

_____ @ _____

_____ @ _____

TOTAL _____

PLUG & FLOAT EQUIPMENT

_____ @ _____

_____ @ _____

Dry hole Plug @ _____

_____ @ _____

_____ @ _____

TOTAL _____

SALES TAX (If Any) _____

TOTAL CHARGES _____

GLOBAL CEMENTING, L.L.C.

1557

REMIT TO 18048 170RD
RUSSELL, KS 67665

SERVICE POINT:
RUSSELL, KS

DATE <u>12-11-2014</u>	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE <u>MENSE</u>	WELL #. <u>1-36</u>	LOCATION			COUNTY <u>SHERIDAN</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (CIRCLE ONE)							

CONTRACTOR WW DRILLING Rig # 10

TYPE OF JOB SURFACE

HOLE SIZE <u>12 1/4</u>	T.D.
CASING SIZE <u>8 5/8</u>	DEPTH <u>309.79</u>
TUBING SIZE	DEPTH
DRILL PIPE	DEPTH
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT
CEMENT LEFT IN CSG.	
PERFS	
DISPLACEMENT	

EQUIPMENT

PUMP TRUCK	CEMENTER <u>BRAD</u>
# <u>P1</u>	HELPER <u>BUD</u>
BULK TRUCK	
# <u>B3</u>	DRIVER <u>MARK</u>
BULK TRUCK	
#	DRIVER

OWNER _____

CEMENT AMOUNT ORDERED 240 SY COMMON
w/ 3% CC + 2% GEL

COMMON	@	_____
POZMIX	@	_____
GEL	@	_____
CHLORIDE	@	_____
ASC	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
HANDLING	@	_____
MILEAGE		_____
		TOTAL _____

REMARKS:

RUN 7 JOINTS OF CASING AND HANDING
JOINT - PUT ON 5/8 WEDGE - GET CIRCULATION -
HOOK UP CEMENT - PUMP 240 SY CEMENT -
DISPLACE w/ 1 1/4 BBL H2O - SHUT IN w/
800 PSI - CEMENT DID CIRCULATE

SERVICE

DEPTH OF JOB	_____	
PUMP TRUCK CHARGE	_____	
EXTRA FOOTAGE	@ _____	
MILEAGE	@ _____	
MANIFOLD	@ _____	
_____	@ _____	
_____	@ _____	
		TOTAL _____

CHARGE TO: CULBREATH OIL & GAS

STREET _____

CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
		TOTAL _____

Global Cementing, L.L.C.,
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME [Signature]

SIGNATURE _____

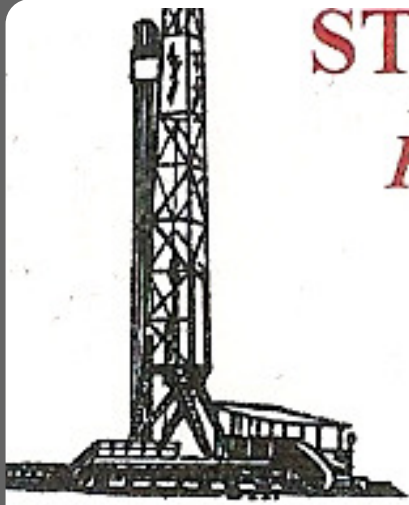
SALES TAX (If Any) _____

TOTAL CHARGES _____

DISCOUNT _____ IF PAID IN 30 DAYS

STEVEN P. MURPHY, P.G.

Petroleum Geologist (KS #228)



Cell 620.639.3030

Fax 785.387.2400

RR#1, Box 69

Otis, Kansas 67565

geomurphy@gbta.net

Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: Mense #1-36
API: 15-179-21385-00-00

Location: Sheridan County

License Number: 34344

Spud Date: 12/11/2014

Region: Kansas

Drilling Completed: 12/20/2014

Surface Coordinates: 1400' FSL & 2500' FWL (Approx. SE SE NE SW)

Section 36-T9S-R26W

Bottom Hole Coordinates: Same as above (Vertical well w/min deviation)

Ground Elevation (ft): 2908'

K.B. Elevation (ft): 2913'

Logged Interval (ft): 3500 To: TD

Total Depth (ft): LTD - 4694'

Formation: Topeka through Miss

Type of Drilling Fluid: Chemical (Andy's Mud)

Printed by STRIP.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Culbreath Oil & Gas, LLC
Address: 1532 S. Peoria Ave
Tulsa, OK 74120-6202

GEOLOGIST

Name: Steven P. Murphy, PG (KS License #228) & Anthony Luna
Company: Consulting Petroleum Geologist
Address: 3365 CR 390
Otis, KS 67565

LogTops (Datum)

Open-hole logging was performed by Halliburton. The following are formation tops w/associated datums:

Anhydrite Top - 2450 (+463)
Anhydrite Base - 2479 (+434)
Topeka - 3725 (-812)
Heebner - 3941 (-1028)
Toronto - 3962 (-1049)
Lansing - 3977 (-1064)
Muncie Creek - 4113 (-1200)
Stark - 4203 (-1290)
Hushpuckney - 4235 (-1322)
Base KC - 4263 (-1350)
Marmaton - 4296 (-1383)
Pawnee - 4382 (-1469)
Myrick Station - 4421 (-1508)
Fort Scott - 4454 (-1541)
Cherokee - 4483 (-1570)
Miss - 4546 (-1633)

DSTs

Drillstem testing was performed by Trilobite Testing (Scott City shop):

DST #1 4006-4024 (LKC "B")

45:60:45:90

IF: BOB in 44min, no return

FF: Built to 9in, no return

Recovery: 10' CO (100%O), 126' OMCW (10%O, 70%W, 20%M), 126' OMCW (5%O, 55%W, 40%M)

IHP: 2008 FHP: 1887

IFP: 28-113 ISIP: 1264

FFP: 103-150 FSIP: 1259

BHT - 123 F


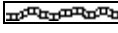
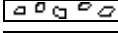
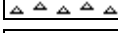








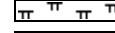

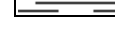
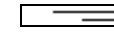



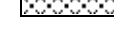
Oil Gravity - 23 API

Chlorides - 60,000 ppm

COMMENTS

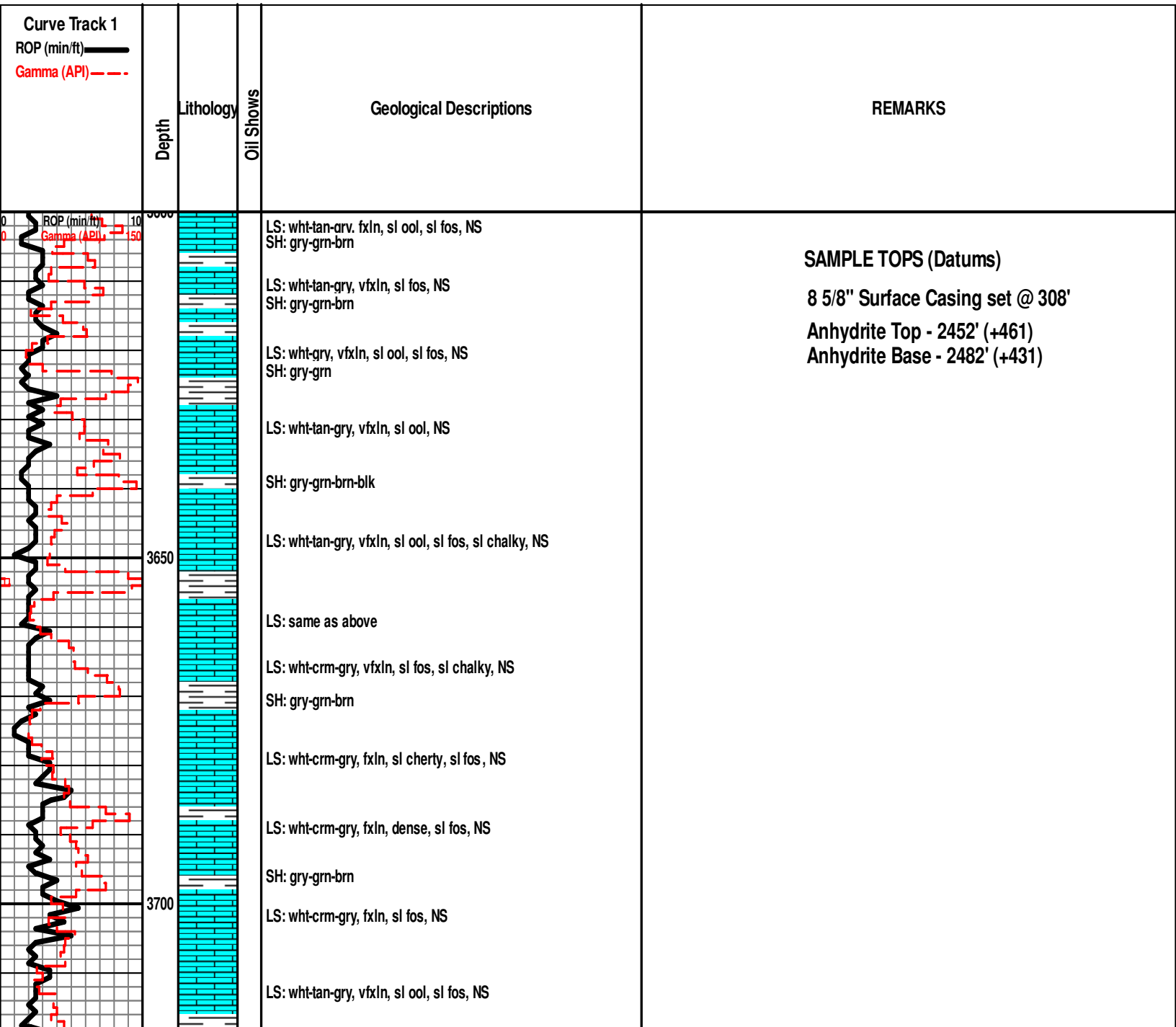
Based on the results of DSTs and log & sample analysis, it was determined that this well is non-commercial and should be plugged & abandoned.

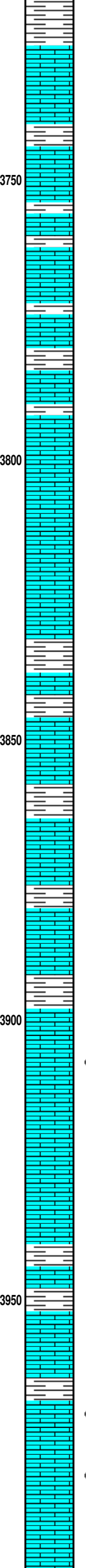
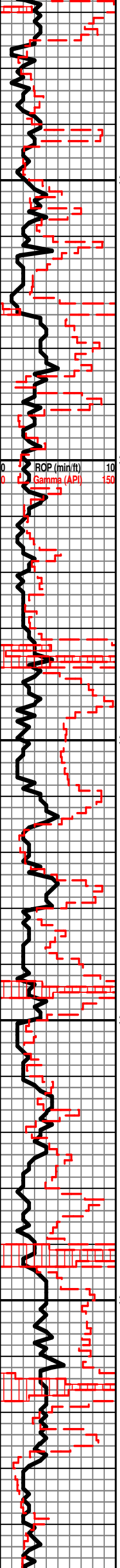
ROCK TYPES

 Anhy  Bent  Brec  Cht  Clyst	 Coal  Congl  Dol  Gyp  Igne	 Lmst  Meta  Mrlst  Salt  Shale	 Shcol  Shgy  Sltst  Ss  Till
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OTHER SYMBOLS

OIL SHOW  Even  Spotted  Ques	 Dead  Gas	INTERVAL  Core  Dst	EVENT  Conn  Rft  Sidewall
--	---	--	---





SH: gry-grn-brn

LS: wht-tan-gry, fxlIn, sl ool, sl fos, NS

LS: wht-crm-tan, fxlIn, sl ool, sl fos, NS

SH: gry-grn

LS: wht-crm-tan, vfxIn, ool, sl fos, NS

LS: wht-crm-gry, vfxIn, dense, ool, sl fos, NS

SH: gry-grn

LS: wht-crm-gry, fxlIn-vfxIn, sl cherty, sl ool, sl fos, NS

SH: gry-grn

LS: wht-crm-tan, vfxIn, dense, ool, NS

LS: wht-crm-tan, vfxIn, dense, ool, sl fos, NS

LS: wht-crm-gry, vfxIn, sl ool, sl fos, NS

SH: gry

LS: wht-crm-tan, vfxIn, sl ool, sl fos, NS

SH: blk, carb

SH: gry-grn-brn-blk

LS: wht-tan-gry, fxlIn, sl fos, NS

LS: wht-crm-tan, vfxIn, sl ool, sl fos, NS

SH: gry-grn-blk

LS: wht-tan-gry, vfxIn, sl fos, NS

SH: gry-grn-brn-blk

LS: wht-crm-gry, vfxIn, sl ool, sl fos, NS

SH: gry

LS: wht-crm-gry, vfxIn, oolitic, pr-fr por, tight, vssfo, no odor

LS: wht-crm-gry, vfxIn, dense, sl ool, NS

LS: wht-crm-gry, vfxIn, sl ool, sl fos, NS

SH: blk, carb

SH: gry-grn-brn-blk

LS: wht-crm-tan, vfxIn, sl ool, sl fos, NS

LS: wht-crm-tan, vfxIn, dense, pr ool por, tight, nsfo, wk odor

LS: same as above

LS: wht-crm-tan, vfxIn, dense, ool, sl fos, NS

LS: wht-crm-tan, vfxIn, sl ool, NS

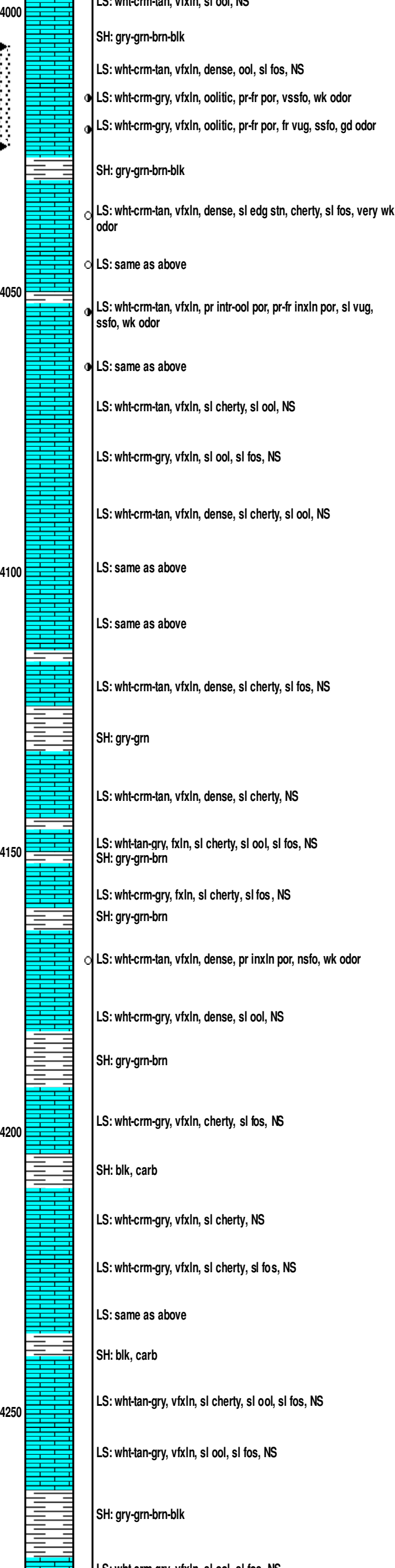
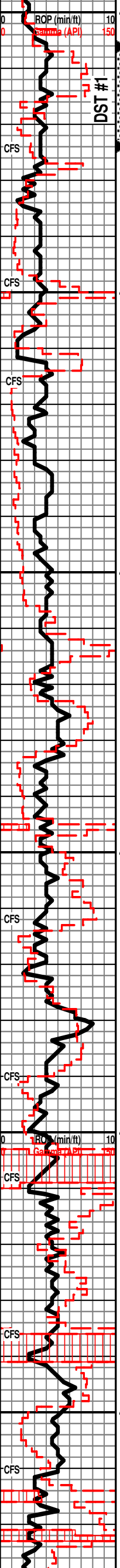
Topeka 3726 (-813)

Heebner 3942 (-1029)

Toronto 3961 (-1048)

Lansing 3978 (-1065)

Strap Pipe - 1.11 long
 Survey @ 4024' - 1/2 deg



LS: wht-crm-tan, vfxln, sl ool, NS

SH: gry-grn-brn-blk

LS: wht-crm-tan, vfxln, dense, ool, sl fos, NS

LS: wht-crm-gry, vfxln, oolitic, pr-fr por, vssto, wk odor

LS: wht-crm-gry, vfxln, oolitic, pr-fr por, fr vug, ssfo, gd odor

SH: gry-grn-brn-blk

LS: wht-crm-tan, vfxln, dense, sl edg stn, cherty, sl fos, very wk odor

LS: same as above

LS: wht-crm-tan, vfxln, pr intr-ool por, pr-fr inxln por, sl vug, ssfo, wk odor

LS: same as above

LS: wht-crm-tan, vfxln, sl cherty, sl ool, NS

LS: wht-crm-gry, vfxln, sl ool, sl fos, NS

LS: wht-crm-tan, vfxln, dense, sl cherty, sl ool, NS

LS: same as above

LS: same as above

LS: wht-crm-tan, vfxln, dense, sl cherty, sl fos, NS

SH: gry-grn

LS: wht-crm-tan, vfxln, dense, sl cherty, NS

LS: wht-tan-gry, fxln, sl cherty, sl ool, sl fos, NS
SH: gry-grn-brn

LS: wht-crm-gry, fxln, sl cherty, sl fos, NS
SH: gry-grn-brn

LS: wht-crm-tan, vfxln, dense, pr inxln por, nsfo, wk odor

LS: wht-crm-gry, vfxln, dense, sl ool, NS

SH: gry-grn-brn

LS: wht-crm-gry, vfxln, cherty, sl fos, NS

SH: blk, carb

LS: wht-crm-gry, vfxln, sl cherty, NS

LS: wht-crm-gry, vfxln, sl cherty, sl fos, NS

LS: same as above

SH: blk, carb

LS: wht-tan-gry, vfxln, sl cherty, sl ool, sl fos, NS

LS: wht-tan-gry, vfxln, sl ool, sl fos, NS

SH: gry-grn-brn-blk

LS: wht-crm-gry, vfxln, sl ool, sl fos, NS

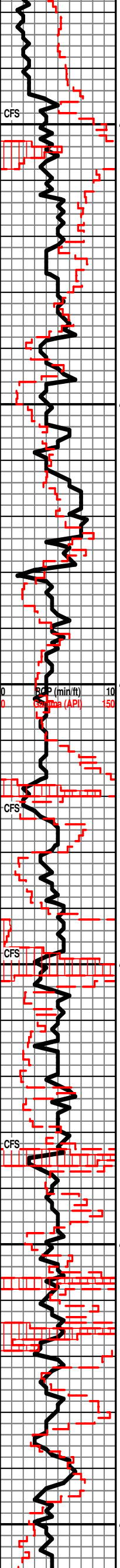
Muncie Creek 4119 (-1206)

Stark 4205 (-1292)

Hushpuckney 4238 (-1325)

BKC 4261 (-1348)

DST # 1 4006-4024 (LKC "B")
 45:60:45:90
 IF: BOB in 44min, no return
 FF: Built to 9in, no return
 Recovery: 10' CO (100%O), 126' OMCW (10%O, 70%W, 20%M), 126' OMCW (5%O, 55%W, 40%M)
 IHP: 2008 FHP: 1887
 IFP: 28-113 ISIP: 1264
 FFP: 103-150 FSIP: 1259
 BHT - 123 F
 Oil Gravity - 23 API
 Chlorides - 60,000 ppm



LS: wht-cri-gry, vfxln, sl ool, sl fos, NS

Sist: red, sub rd, fr w-std, friable, NS

LS: wht-tan-gry, vfxln, sl cherty, sl ool, NS

LS: wht-crm-gry, vfxln, sl ool, NS

LS: wht-crm-gry, vfxln, sl ool, sl fos, NS

LS: same as above

SH: gry-grn-brn-blk

LS: wht-tan-gry, vfxln, sl cherty, sl ool, sl fos, NS

SH: gry-grn-brn-blk

LS: wht-crm-tan, vfxln, sl cherty, NS

SH: gry-grn-brn-blk

LS: wht-crm-tan, vfxln, dense, cherty, sl ool, NS

LS: wht-gry, fxl, sl ool, sl fos, NS

SH: gry-grn-brn-blk

LS: wht-gry, vfxln, sl ool, sl fos, NS

SH: blk

LS: wht-tan-gry, vfxln, dense, cherty, sl fos, NS

LS: wht-crm-gry, vfxln, sl cherty, sl fos, NS

SH: gry-grn-brn-blk

SH: blk

LS: wht-tan-gry, vfxln, sl cherty, sl ool, sl fos, NS

LS: wht-crm-gry, vfxln, cherty, sl ool, sl fos, NS

LS: wht-crm-gry, vfxln, cherty, sl fos, NS

SH: blk. carb

LS: wht-crm-gry, vfxln, sl cherty, sl ool, NS

LS: wht-crm-gry, vfxln, sl cherty, NS

SH: gry-grn-brn-blk

LS: wht-crm-gry, vfxln, sl cherty, sl fos, NS

SH: gry-grn-brn-blk

LS: wht-tan-gry, vfxln, sl cherty, sl fos, NS

SH: gry-grn-brn

LS: wht-crm-gry, vfxln, sl cherty, NS

SH: gry-grn-brn

Sst: clr-wht, vfg, pr-fr srt, sub-rd, friable, NS

SH: gry-grn-brn-blk

Marmaton 4290 (-1377)

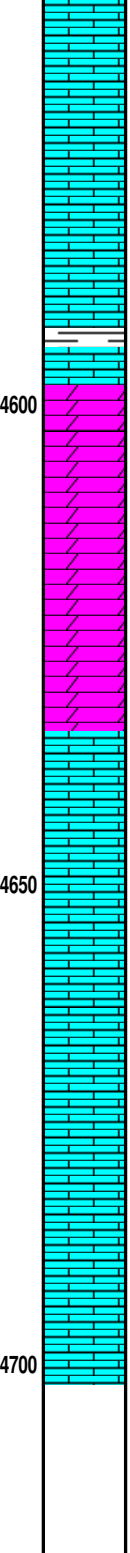
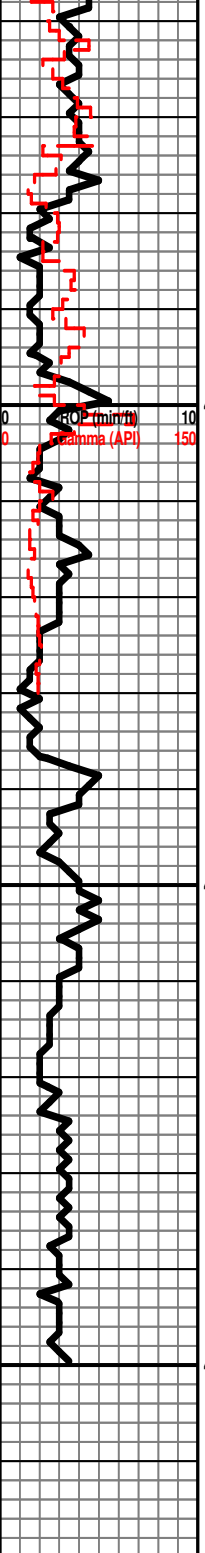
Pawnee 4389 (-1476)

Myrick Station 4423 (-1510)

Fort Scott 4455 (-1542)

Cherokee 4484 (-1571)

Miss 4554 (-1641)



LS: wht-tan-gry, vfxln, dense, pelletal, sl cherty, sl fos, NS

LS: wht-tan-gry, vfxln, pelletal, cherty, sl fos, NS

LS: wht-crm-gry, vfxln, cherty, sl fos, NS
SH: gry-grn-brn-blk

4600
Dol: wht-tan, fxl, dense, suc, NS

Dol: same as above w/abund chert

Dol: same as above

Dol: same as above

4650
LS: wht-crm-tan, vfxln, abund chert, sl fos, NS

LS: wht-tan-gry, vfxln, abund chert, sl fos, NS

LS: wht-crm-tan, vfxln, abund chert, sl fos, NS

LS: same as above

LS: same as above w/minor shale

LS: same as above

4700

LTD - 4694'
RTD - 4700'

Survey @ TD - 3/4 deg



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Culbreath Oil & Gas

36-10s-30w Sheridan County

1532 S Peoria Ave
Tulsa OK, 74120

Mense # 1-36

Job Ticket: 58648

DST#: 1

ATTN: Anthony Luna

Test Start: 2014.12.16 @ 15:28:00

GENERAL INFORMATION:

Formation: **LKC "B"**

Deviated: No Whipstock: 0.00 ft (KB)

Time Tool Opened: 17:34:30

Time Test Ended: 23:21:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Justin Harris

Unit No: 58

Interval: 4006.00 ft (KB) To 4024.00 ft (KB) (TVD)

Reference Elevations: 2913.00 ft (KB)

Total Depth: 4024.00 ft (KB) (TVD)

2912.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 1.00 ft

Serial #: 6625 Outside

Press @ Run Depth: 150.34 psig @ 4020.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.12.16

End Date:

2014.12.16

Last Calib.:

2014.12.16

Start Time: 15:28:01

End Time:

23:21:30

Time On Btm:

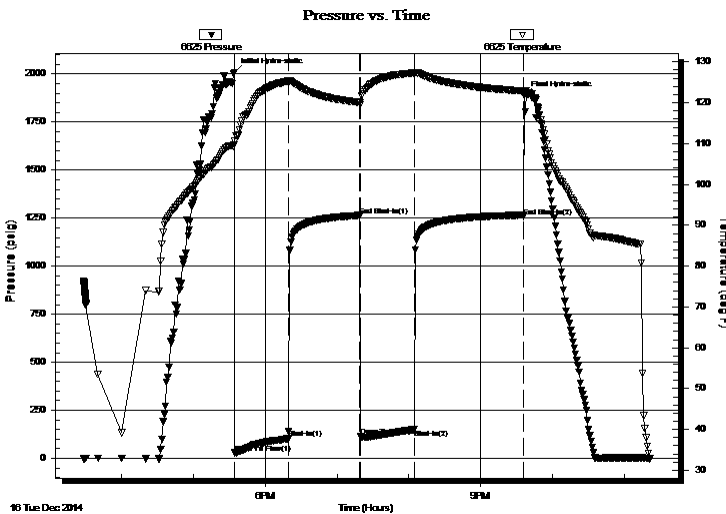
2014.12.16 @ 17:34:00

Time Off Btm:

2014.12.16 @ 21:36:30

TEST COMMENT: 45: B.O.B in 44 mins.
60: No Return.
45: Weak surface blow build to 9"
90: No Return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2008.47	109.73	Initial Hydro-static
1	28.21	110.60	Open To Flow (1)
45	102.70	125.30	Shut-In(1)
105	1264.16	120.09	End Shut-In(1)
106	112.50	119.57	Open To Flow (2)
151	150.34	127.29	Shut-In(2)
242	1259.42	122.83	End Shut-In(2)
243	1886.52	122.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
126.00	omcw 5o 40m 55w	0.65
126.00	omcw 10o 20m 70w	1.77
10.00	Clean oil	0.14

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Culbreath Oil & Gas

36-10s-30w Sheridan County

1532 S Peoria Ave
Tulsa OK, 74120

Mense # 1-36

Job Ticket: 58648

DST#: 1

ATTN: Anthony Luna

Test Start: 2014.12.16 @ 15:28:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

23 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

60000 ppm

Viscosity: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
126.00	omcw 5o 40m 55w	0.652
126.00	omcw 10o 20m 70w	1.767
10.00	Clean oil	0.140

Total Length: 262.00 ft Total Volume: 2.559 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API RW ..25 @ 27 F = 60000 Chlorides

