

Confidentiality Requested:

Yes No

**KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION**

Form ACO-1

January 2018

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

Gas DH EOR

OG GSW

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 EOR Conv. to SWD

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

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 Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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 Geologist Report / Mud Logs <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				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
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) (Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Casino Petroleum, LLC
Well Name	HERTER 4
Doc ID	1418478

All Electric Logs Run

Dual Comp Porosity Log
Dual Induction log
Computer processed Interpretation
Borehole Compensated Sonic Log
Radial Bond Log with gamma Ray
Microresistivity Log

Form	ACO1 - Well Completion
Operator	Casino Petroleum, LLC
Well Name	HERTER 4
Doc ID	1418478

Tops

Name	Top	Datum
Anhydrite	504	+1278
B. Anhydrite	526	+1256
Heebner	2914	-1132
Toronto	2933	-1151
Douglas	2948	-1166
Brown Lime	3043	-1261
Lansing	3061	-1279
Arbuckle	3295	-1513
RTD	3400	-1618
LTD	3393	-1611



Musgrove

Petroleum Geology
212 Main Street, Claflin KS

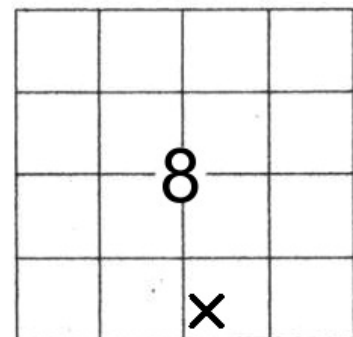
GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

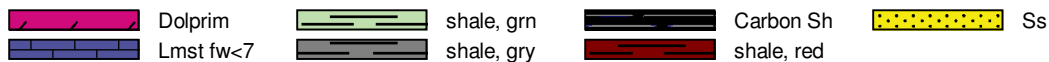
COMPANY <u>Casino Petroleum, LLC</u>	ELEVATIONS
LEASE <u>Herter #4</u>	KB <u>1782'</u>
FIELD <u>Chase-Silica</u>	DF _____
LOCATION <u>S/2-S/2-SE (330' FSL& 1320' FEL)</u>	GL <u>1772'</u>
SEC <u>8</u> TWSP <u>20S</u> RGE <u>11W</u>	Measurements Are All From <u>KB</u>
COUNTY <u>Barton</u> STATE <u>Kansas</u>	
CONTRACTOR <u>Southwind Drilling, inc. (Rig # 3)</u>	CASING
SPUD <u>7/17/2018</u> COMP <u>7/24/2018</u>	SURFACE <u>8 5/8"@275'</u>
RTD <u>3400'</u> LTD <u>3393'</u>	PRODUCTION <u>5 1/2"@3393'</u>
MUD UP <u>2527'</u> TYPE MUD <u>Chemical</u>	ELECTRICAL SURVEYS
	Pioneer; DIL/CNL/CDL/ BHCS/MEL

SAMPLES SAVED FROM 2700' TO RTD
 DRILLING TIME KEPT FROM 2700' TO RTD
 SAMPLES EXAMINED FROM 2800' TO RTD
 GEOLOGICAL SUPERVISION FROM 2840' TO RTD
 GEOLOGIST ON WELL Jim Musgrove

FORMATION TOPS	LOG		SAMPLES	
Anhydrite	504	(+1278)		
B. Anhydrite	526	(+1256)		
Heebner	2914	(-1132)	2922	(-1140)
Toronto	2933	(-1151)	2941	(-1159)
Douglas	2948	(-1166)	2956	(-1174)
Brown Lime	3043	(-1261)	3050	(-1268)
Lansing	3061	(-1279)	3068	(-1286)
Arbuckle	3295	(-1513)	3305	(-1523)
RTD	3400	(-1618)	3400	(-1618)
LTD	3393	(-1611)	3393	(-1611)



ROCK TYPES



ACCESSORIES

STRINGER

Sandstone

OTHER SYMBOLS

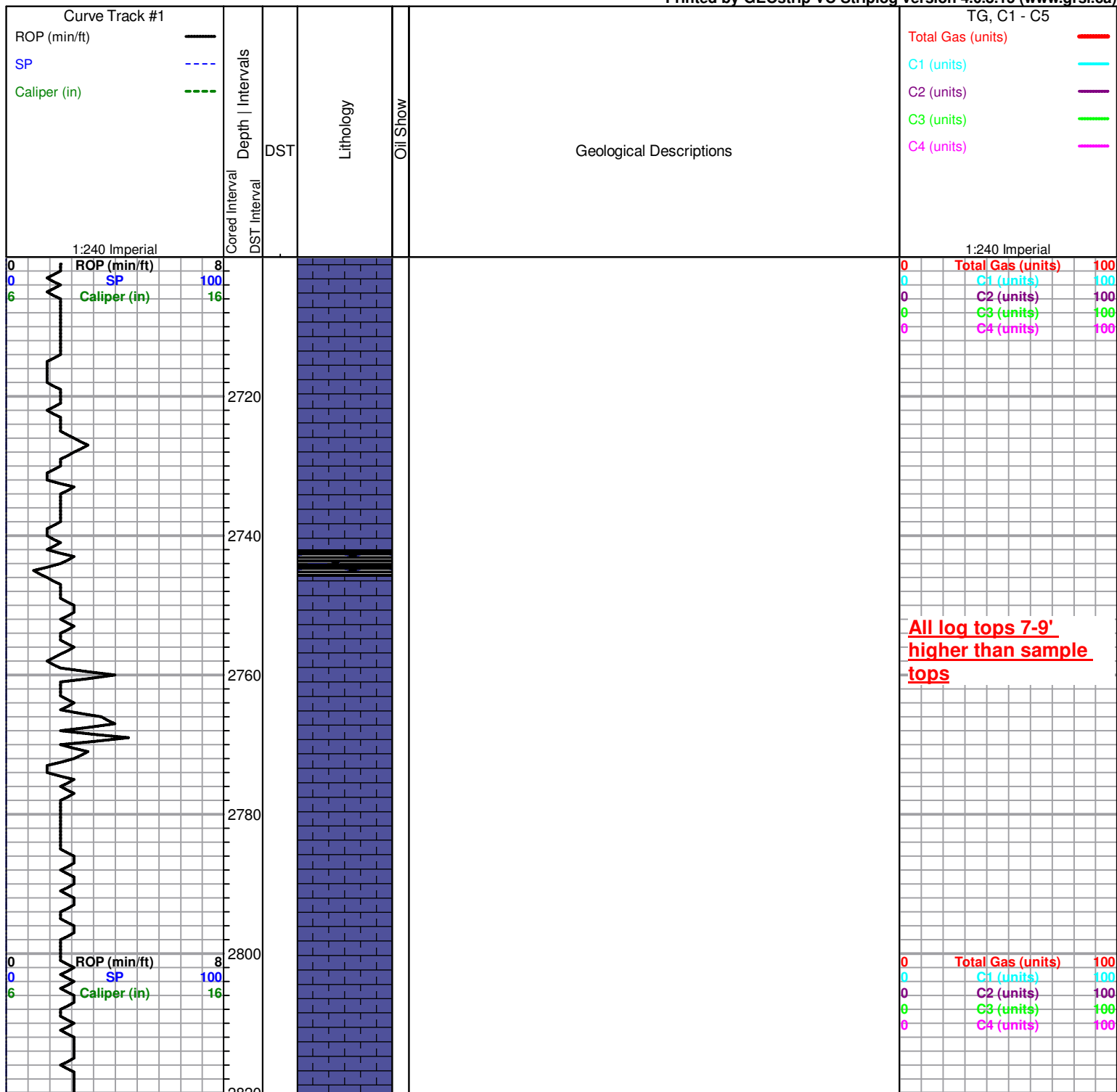
Oil Show

- Good Show
- Fair Show
- Poor Show
- Spotted or Trace
- Questionable Stn
- Dead Oil Stn
- Fluorescence
- * Gas

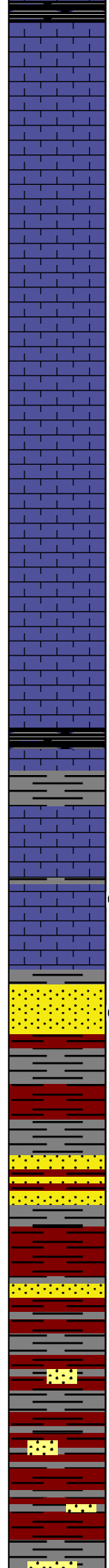
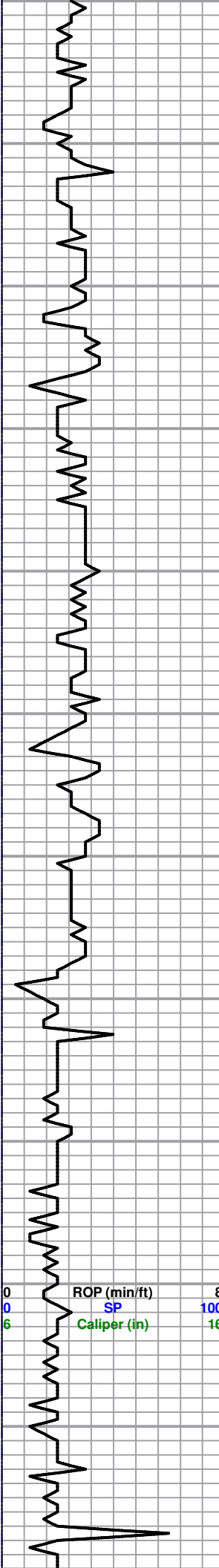
DST

- DST Int
- DST alt
- Core
- tail pipe

Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca)



2820
2840
2860
2880
2900
2920
2940
2960
2980
3000
3020
3040



LS, white, cream, fxl, gran., + wh/gry boney chert

Tr. coal black chert + LS, a/a

LS, tan, gry, f-med xln, slightly chalky; poor vis. porosity, no shows

LS, a/a, tr gry, chert

HEEBNER 2922.0 (-1140.0) LOG [-1132.0]

Sh, black carb

Sh, gry, gryish green

TORONTO 2941.0 (-1159.0) LOG [-1151.0]

LS, tan, f-med xln, few foss, chalky in pt,??? lt. brn stain, nsfo, no odor
(+ Tr. wht, med xln, chalky ls, wk brn stain

DOUGLAS 2956.0 (-1174.0) LOG [-1166.0]

Sd. gry, white, f.g. mica/cal, tr. blk stain, nsfo, no odor

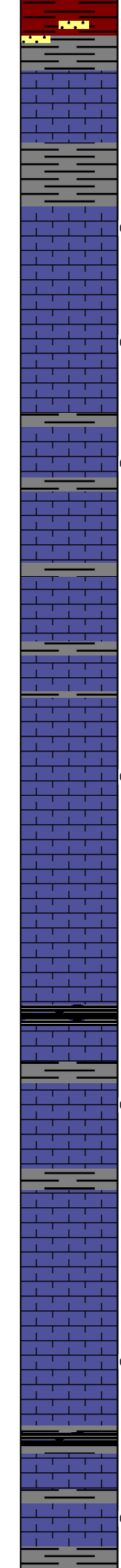
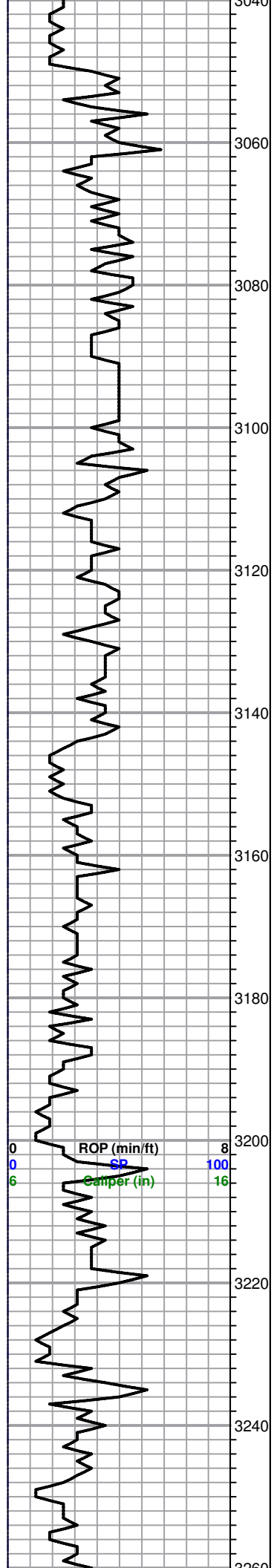
Sh, gry/ gryish, green silty sh.

Sd. white, gryish green, vfg; mica, scattered porosity,

Sh & sd a/a

A/a

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100



BROWN LIME 3050.0 (-1268.0) LOG [-1261.0]

LS, tan, fxl, slightly cherty, no shows

Sh, gry, silt

LANSING 3068.0 (-1268.0) LOG [-1279.0]

○ LS, wht/cream/gry, chlky, poorly developed, brn-gry stain, nsfo, no odor

○ LS, white, sub oom, ool, poor vis. porosity, gry/ blk stain, nsfo, no odor

○ LS, cream, oom in pt., chalky, poor vis. brn- golden brn stain, nsfo, ??? odor

LS, gry, fxl, slightly foss, no shows

LS, gry; highly ool, poor vis. porosity, no shows

○ LS, white/crm, foss/ ool, few sub oom, chalky, tr. brn stain, nsfo, no odor

LS, a/a

LS, tan, fxl, slightly cherty, (dense)

Tr. black carb sh.

○ LS, tan, oom, scattered porosity, brn stain (poor) nsfo, no odor

LS, gry, ool, poorly developed, no shows

○ LS, cream, gry, foss, oom, scattered porosity, chalky in pt. tr. light brn stain, wk sfo, ??? odor

Sh, gry, rusty brown / black carb

○ LS, white, gry, foss, scattered porosity, tr. brn stain, tr. fo, no odor

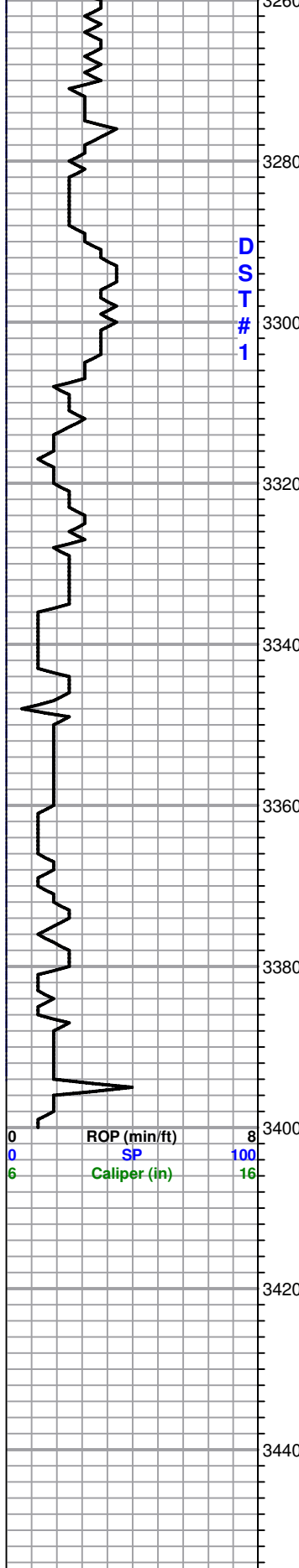
0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

DST#1 3290-3322

Log corr. 3283-3315

30-30-30-45

1st Open:
BOB 1 min.



LS, brn/ gry, slightly cherty, dense

Tr. black carb Sh.

○ LS, gry, tan, foss, chalky, dense, tr. gry- brn stain, nsfo, no odor

LS, tan, fxl, cherty, dense

ARBUCKLE 3305.0 (-1523.0) LOG [-1513.0]

● Dol. white/crm, f-med xln, scattered porosity, tr. brn / golden brown stain, sfo, tr. ft odor

● Dol, tan, white, suc. scattered p.p. porosity, brn stain/ sat. sfo, odor

Tr. white/gry chert

○ Dol, gry, white, f-med xln , scatt/ fr. inxln prosity, gry- blk stain, nsfo, ft. / fr. odor

○ Dol. tan/ gry, f-med xln suc. in pt, fr-good inxln porosity, brn stain, sfo, ft. odor

Dol. a/a, + gry/white chert

● Dol, white, gry, tan, f-med xln, fair inxln porosity, brn/ gry blk stain, tr. fo, ft. odor

a/a + gry, white, boney chert

● Dol. gry-white, oom, fr oom, vuggy porosity, tr. brn stain, tr. fo. ??? odor

Dol, tan, fxl, cherty (dense) + white, ool chert. nsfo, no odor

RTD 3400 (-1618)

LTD 3393 (-1611)

***REMARKS - ALL LOG TOPS ARE 7-9' HIGHER THAN SAMPLE TOPS**

2nd Open:

BOB 1 min.

Recovery:

60' Clean Oil

441' HOCM

(30%O,30%W, 40%M)

1323' OCMW

(20% O,60%W,20%M)

Pressures:

ISIP 850 psi

FSIP 914 psi

IFP 271-624 psi

FFP 658-780 psi

HSH 1720-1573 psi

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100



DRILL STEM TEST REPORT

Prepared For: **Casino Petroleum, LLC**

PO Box 415
Ellinwood, KS 67526

ATTN: Jim Musgrove

Herter #4

8-20S-11W Barton,KS

Start Date: 2018.07.23 @ 00:03:13

End Date: 2018.07.23 @ 08:33:43

Job Ticket #: 63132 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2018.07.23 @ 13:37:21



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Casino Petroleum, LLC
 PO Box 415
 Ellinwood, KS 67526
 ATTN: Jim Musgrove

8-20S-11W Barton,KS

Herter #4

Job Ticket: 63132

DST#: 1

Test Start: 2018.07.23 @ 00:03:13

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 03:18:13
 Tester: Brannan Lonsdale
 Time Test Ended: 08:33:43
 Unit No: 73
 Interval: **3290.00 ft (KB) To 3322.00 ft (KB) (TVD)**
 Reference Elevations: 1781.00 ft (KB)
 Total Depth: 3322.00 ft (KB) (TVD)
 1771.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 10.00 ft

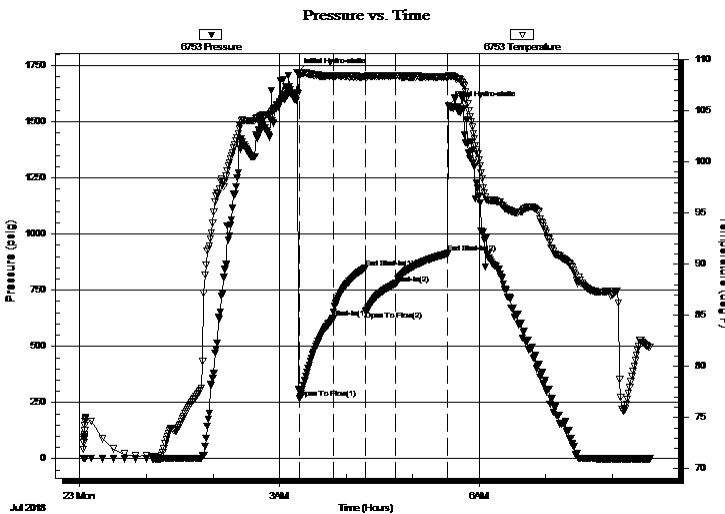
Serial #: 6753

Outside

Press@RunDepth: 779.90 psig @ 3291.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2018.07.23 End Date: 2018.07.23 Last Calib.: 2018.07.23
 Start Time: 00:03:18 End Time: 08:33:42 Time On Btm: 2018.07.23 @ 03:16:13
 Time Off Btm: 2018.07.23 @ 05:32:13

TEST COMMENT: 30- IF- BOB 20 secs
 30- IS- No blow
 30- FF- BOB 1 min
 45- FSI- No blow

PRESSURE SUMMARY



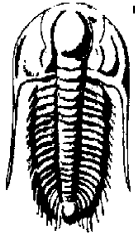
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1719.52	106.76	Initial Hydro-static
2	270.50	108.57	Open To Flow (1)
32	624.42	108.43	Shut-In(1)
61	850.19	108.31	End Shut-In(1)
62	658.27	108.33	Open To Flow (2)
89	779.90	108.31	Shut-In(2)
136	914.39	108.25	End Shut-In(2)
136	1572.61	108.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1323.00	OCMW, 15%O 60%W 15%M	18.75
441.00	WOCM, 30%O 30%W 40%M	6.25
30.00	CGO, 10%G 90%O	0.43

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Casino Petroleum, LLC
PO Box 415
Ellinwood, KS 67526
ATTN: Jim Musgrove

8-20S-11W Barton, KS

Herter #4

Job Ticket: 63132

DST#: 1

Test Start: 2018.07.23 @ 00:03:13

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:18:13

Time Test Ended: 08:33:43

Test Type: Conventional Bottom Hole (Initial)

Tester: Brannan Lonsdale

Unit No: 73

Interval: 3290.00 ft (KB) To 3322.00 ft (KB) (TVD)

Reference Elevations: 1781.00 ft (KB)

Total Depth: 3322.00 ft (KB) (TVD)

1771.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6771 Inside

Press@RunDepth: psig @ 3291.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.07.23

End Date: 2018.07.23

Last Calib.: 2018.07.23

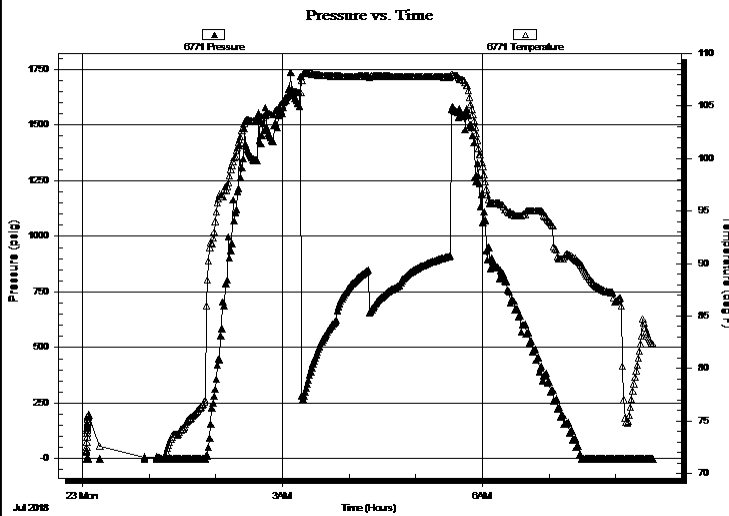
Start Time: 00:03:31

End Time: 08:33:51

Time On Btm:

Time Off Btm:

TEST COMMENT: 30- IF- BOB 20 secs
30- IS- No blow
30- FF- BOB 1 min
45- FS- No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
1323.00	OCMW, 15%O 60%W 15%M	18.75
441.00	WOCM, 30%O 30%W 40%M	6.25
30.00	CGO, 10%G 90%O	0.43

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Casino Petroleum, LLC

8-20S-11W Barton,KS

PO Box 415
Ellinwood, KS 67526

Herter #4

Job Ticket: 63132

DST#: 1

ATTN: Jim Musgrove

Test Start: 2018.07.23 @ 00:03:13

Tool Information

Drill Pipe:	Length: 3296.00 ft	Diameter: 3.82 inches	Volume: 46.72 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	50000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial	34000.00 lb
Depth to Top Packer:	3290.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	32.00 ft				
Tool Length:	58.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3265.00	
Shut In Tool	5.00			3270.00	
Hydraulic tool	5.00			3275.00	
Gap Sub	4.00			3279.00	
Safety Joint	2.00			3281.00	
Packer	5.00			3286.00	26.00 Bottom Of Top Packer
Packer	4.00			3290.00	
Stubb	1.00			3291.00	
Recorder	0.00	6771	Inside	3291.00	
Recorder	0.00	6753	Outside	3291.00	
Perforations	28.00			3319.00	
Bullnose	3.00			3322.00	32.00 Bottom Packers & Anchor

Total Tool Length: 58.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Casino Petroleum, LLC

8-20S-11W Barton,KS

PO Box 415
Ellinwood, KS 67526

Herter #4

Job Ticket: 63132

DST#: 1

ATTN: Jim Musgrove

Test Start: 2018.07.23 @ 00:03:13

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

34 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

37000 ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
1323.00	OCMW, 15%O 60%W 15%M	18.754
441.00	WOCM, 30%O 30%W 40%M	6.251
30.00	CGO, 10%G 90%O	0.425

Total Length: 1794.00 ft Total Volume: 25.430 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

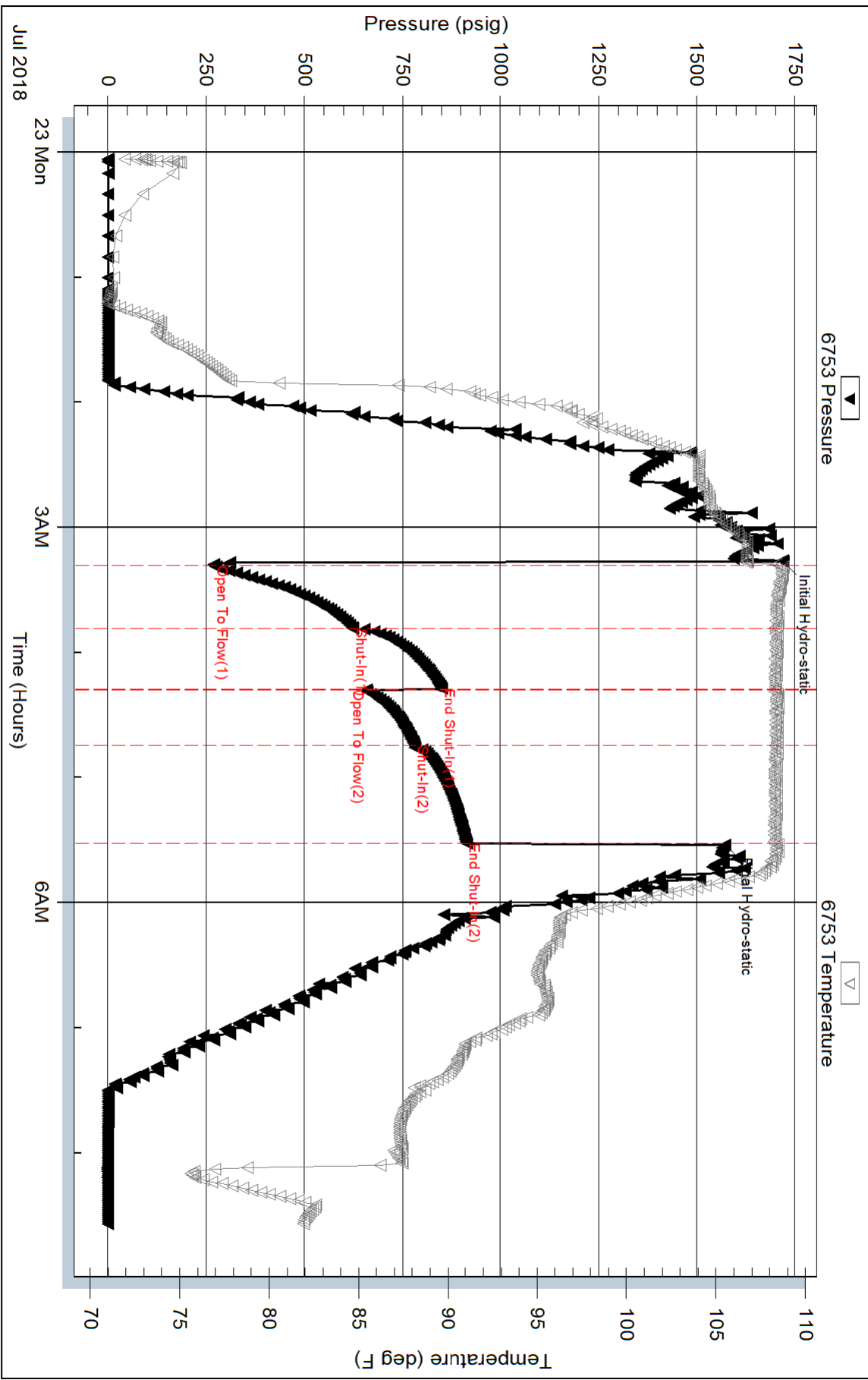
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: .15@82deg

Pressure vs. Time



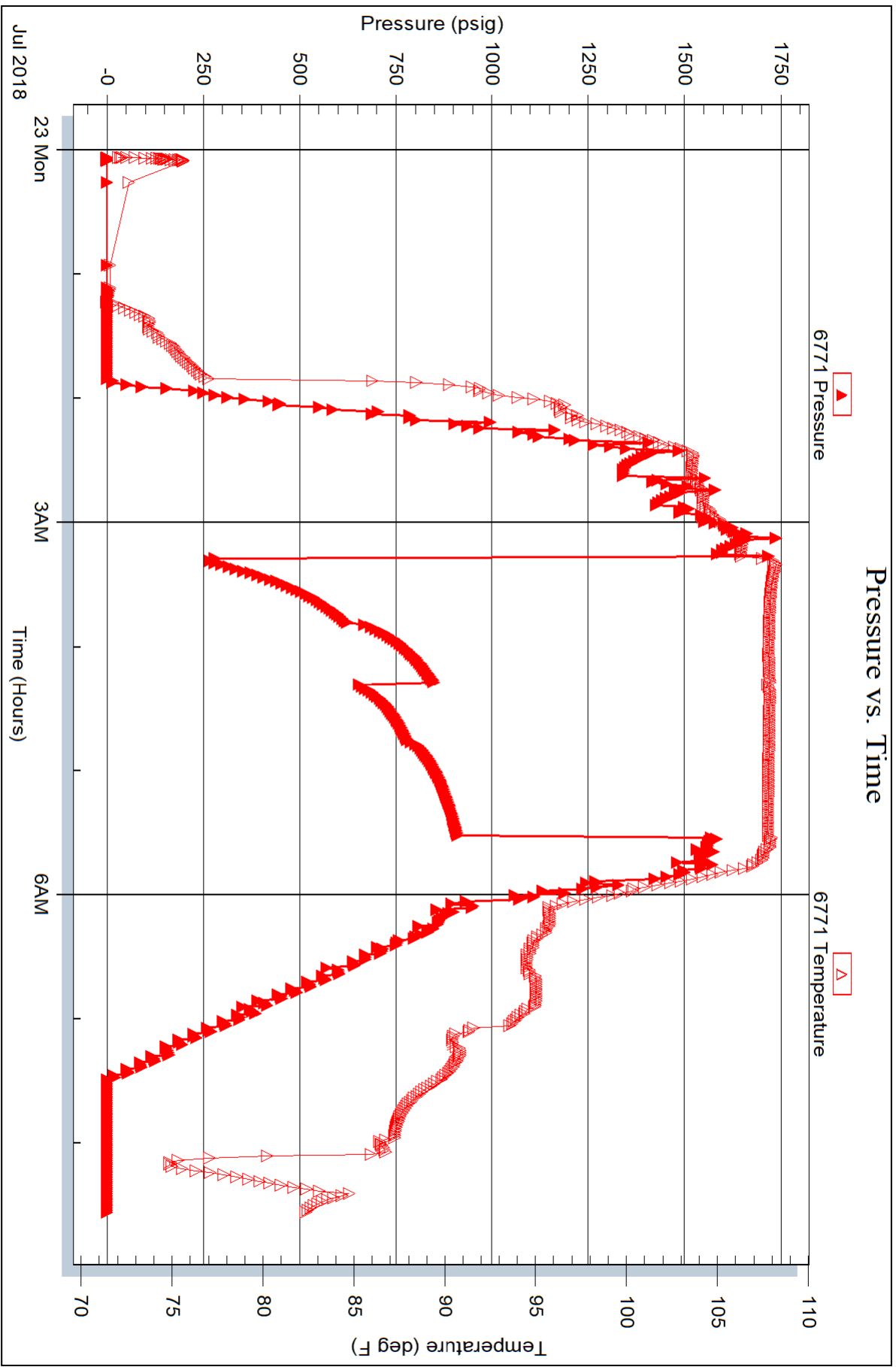
Serial #: 6771

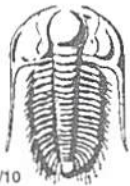
Inside

Casino Petroleum, LLC

Herter #4

DST Test Number: 1





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **63132**

Well Name & No. Herter #4 Test No. 1 Date 7/23/18
 Company Casino Petroleum, LLC Elevation 1781 KB 1771 GL
 Address PO Box 415 E/Inwood, KS 67526
 Co. Rep / Geo. Jim Musgrove Rig Southwind #1
 Location: Sec. 8 Twp. 20 S Rge. 11 W Co. Barton State KS

Interval Tested 3290-3322 Zone Tested Arbuckle
 Anchor Length 32' Drill Pipe Run 3296 Mud Wt. 9.3
 Top Packer Depth 3285 Drill Collars Run --- Vis 59
 Bottom Packer Depth 3290 Wt. Pipe Run --- WL 9.6
 Total Depth 3322 Chlorides 3300 ppm System LCM 1 #
 Blow Description IF-BOB 20secs
ISI- No How
FF-BOB 1min
FSI- No How

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>CAO</u>	<u>10</u>	<u>90</u>		
<u>441</u>	<u>WOCM</u>		<u>30</u>	<u>30</u>	<u>40</u>
<u>1323</u>	<u>OCMW</u>		<u>15</u>	<u>60</u>	<u>15</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1794 BHT 108° Gravity 34 API RW .15 @ 82° F Chlorides 3700 ppm
 Test 1050
 Jars _____
 Safety Joint _____
 Circ Sub _____
 Hourly Standby _____
 Mileage 154 RT 36rt
 Sampler _____
 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1086
 T-On Location 2349
 T-Started 0003
 T-Open 0316
 T-Pulled 0531
 T-Out 0834
 Comments EM Tool
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 0
 Total 1086
 MP/DST Disc't _____

Approved By _____ Our Representative Braman Lonsdale



FIELD ORDER N° C 45894

BOX 438 • HAYSVILLE, KANSAS 67060
316-524-1225

DATE 7-18 2018

IS AUTHORIZED BY: Casino Petroleum
(NAME OF CUSTOMER)

Address _____ City _____ State _____

To Treat Well As Follows: Lease Herter Well No. #4 Customer Order No. _____

Sec. Twp. Range _____ County Barton State KCS

CONDITIONS: As a part of the consideration hereof it is agreed that Copeland Acid Service is to service or treat at owners risk, the hereinbefore mentioned well and is not to be held liable for any damage that may accrue in connection with said service or treatment. Copeland Acid Service has made no representation, expressed or implied, and no representations have been relied on, as to what may be the results or effect of the servicing or treating said well. The consideration of said service or treatment is payable. There will be no discount allowed subsequent to such date. 6% interest will be charged after 60 days. Total charges are subject to correction by our invoicing department in accordance with latest published price schedules.

The undersigned represents himself to be duly authorized to sign this order for well owner or operator.

THIS ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED _____ By _____
Well Owner or Operator Agent

CODE	QUANTITY	DESCRIPTION	UNIT COST	AMOUNT
2	10	Mileage Pump Truck	4 ⁰⁰	40 ⁰⁰
2		Pump Charge - Surface Pipe		1100 ⁰⁰
2	300	Sacks 60/40 ^{PozMix} 2% Gel	10 ⁷⁵	3225 ⁰⁰
2	16	Calcium Chloride	30 ⁰⁰	480 ⁰⁰
2	316	Bulk Charge	1 ²⁵	395 ⁰⁰
2		Bulk Truck Miles 13.67 x 10 miles = 1367M	Min	250 ⁰⁰
		Process License Fee on _____ Gallons		
		TOTAL BILLING	16%	5390⁰⁰

I certify that the above material has been accepted and used; that the above service was performed in a good and workmanlike manner under the direction, supervision and control of the owner, operator or his agent, whose signature appears below.

Copeland Representative Greg C.

Station 63

419.80
Chris Batchman
Well Owner, Operator or Agent

Remarks _____

NET 30 DAYS



TREATMENT REPORT

Acid Stage No. _____

Date 7/18/2018 District GB F.O. No. 45894
 Company CASINO PETROLEUM
 Well Name & No. HERTER #4
 Location _____ Field _____
 County BARTON State KS

Type Treatment: Amt. Type Fluid Sand Size Pounds of Sand
 Bkdown _____ Bbl./Gal. _____
 _____ Bbl./Gal. _____
 _____ Bbl./Gal. _____
 _____ Bbl./Gal. _____
 Flush _____ Bbl./Gal. _____

Casing: Size 8 5/8 Type & Wt. _____ Set at _____ ft.
 Formation: _____ Perf. _____ to _____
 Formation: _____ Perf. _____ to _____
 Formation: _____ Perf. _____ to _____
 Liner: Size _____ Type & Wt. _____ Top at _____ ft. Bottom at _____ ft.
 Cemented: Yes No Perforated from _____ ft. to _____ ft.
 Tubing: Size & Wt. _____ Swung at _____ ft.
 Perforated from _____ ft. to _____ ft.
 Open Hole Size _____ T.D. _____ ft. P.B. to _____ ft.

Treated from _____ ft. to _____ ft. No. ft. 0
 from _____ ft. to _____ ft. No. ft. 0
 from _____ ft. to _____ ft. No. ft. 0
 Actual Volume of Oil / Water to Load Hole: _____ Bbl./Gal.
 Pump Trucks. No. Used: Std. 365 Sp. _____ Twin _____
 Auxiliary Equipment 327
 Personnel GREG AARON
 Auxiliary Tools _____
 Plugging or Sealing Materials: Type _____ Gals. _____ lb.

Company Representative CHRIS BATCHMAN Treater GREG CURTIS

TIME a.m./p.m.	PRESSURES		Total Fluid Pumped	REMARKS
	Tubing	Casing		
12:15				ON LOCATION
				RUN 8 5/8" PIPE TO 262'
				PUMP 300 SKS 60/40 2% GEL 3% CALCIUM CHLORIDE.
				DISPLACED WITH 16.5 BBLS OF FRESH H2O
				CEMENT CIRCULATED TO SURFACE
3:00				JOB COMPLETE
				THANK YOU!!!

X



NEW WELL

FIELD ORDER Nº C 45487

BOX 438 • HAYSVILLE, KANSAS 67060
316-524-1225

DATE 7/24/12 2012

IS AUTHORIZED BY: Casino Petroleum (NAME OF CUSTOMER)

Address _____ City _____ State _____

To Treat Well As Follows: Lease Header Well No. 4 Customer Order No. _____

Sec. Twp. Range _____ County Benton State ks

CONDITIONS: As a part of the consideration hereof it is agreed that Copeland Acid Service is to service or treat at owners risk, the hereinbefore mentioned well and is not to be held liable for any damage that may accrue in connection with said service or treatment. Copeland Acid Service has made no representation, expressed or implied, and no representations have been relied on, as to what may be the results or effect of the servicing or treating said well. The consideration of said service or treatment is payable. There will be no discount allowed subsequent to such date. 6% interest will be charged after 60 days. Total charges are subject to correction by our invoicing department in accordance with latest published price schedules.

The undersigned represents himself to be duly authorized to sign this order for well owner or operator.

THIS ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED

Well Owner or Operator

By _____

Agent

CODE	QUANTITY	DESCRIPTION	UNIT COST	AMOUNT
2	10	niterse pump truck	4. ⁰⁰	40.00
2	10	niterse pickup	2. ⁰⁰	20.00
2	1	Pump Charge - Cons String		1,600.00
2	175	60% ua per. 2% sol.	10. ⁷⁵	1,881.25
2	750 #	Sclt	.25	187.50
2	100 #	C-37	4. ⁰⁰	400.00
2	100 #	C-41p	3. ⁷⁵	375.00
2	50 #	C-12	6. ⁰⁰	300.00
2	625 #	Gilsonite	.75	468.75
2	600 sol.	Mud Flush	.75	450.00
2	1	Rot. Head Rental		250.00
2	5	Turbo - Centralize - s.	85. ⁰⁰	425.00
2	2	5/8 Baskets	155. ⁰⁰	310.00
2	1	5/8 float shoe w/ Auto Fill		355.00
2	1	5/8 catch down plus 2 baskets		175.00
2	200	Bulk Charge	1. ²⁵	260.00
2		Bulk Truck Miles 8.537 x 10m = 85.37m x 1. ¹⁹	min.	150.00
		Process License Fee on _____ Gallons	15%	7,647.50
		TOTAL BILLING		-1147.13

I certify that the above material has been accepted and used; that the above service was performed in a good and workmanlike manner under the direction, supervision and control of the owner, operator or his agent, whose signature appears below.

Copeland Representative Nelma

6500.37

Station G.R

Chris B.
Well Owner, Operator or Agent

Remarks _____

NET 30 DAYS

TREATMENT REPORT

Acid Stage No. _____

Date 7/24/2018 District GB F.O. No. C45487

Company Casino Petroleum

Well Name & No. Herter #4

Location _____ Field _____

County Barton State KS

Casing: Size 5.5" Type & Wt. 14.5" Set at _____ ft.

Formation: _____ Perf. _____ to _____

Formation: _____ Perf. _____ to _____

Formation: _____ Perf. _____ to _____

Liner: Size _____ Type & Wt. _____ Top at _____ ft. Bottom at _____ ft.

Cemented: Yes No Perforated from _____ ft. to _____ ft.

Tubing: Size & Wt. _____ Swung at _____ ft.

Perforated from _____ ft. to _____ ft.

Open Hole Size _____ T.D. _____ ft. P.B. to _____ ft.

Type Treatment:	Amt.	Type Fluid	Sand Size	Pounds of Sand
Bkdown	_____ Bbl./Gal.	_____	_____	_____
	_____ Bbl./Gal.	_____	_____	_____
	_____ Bbl./Gal.	_____	_____	_____
	_____ Bbl./Gal.	_____	_____	_____
Flush	_____ Bbl./Gal.	_____	_____	_____

Treated from _____ ft. to _____ ft.	No. ft.	0
from _____ ft. to _____ ft.	No. ft.	0
from _____ ft. to _____ ft.	No. ft.	0

Actual Volume of Oil / Water to Load Hole: _____ Bbl./Gal.

Pump Trucks. No. Used: Std. 365 Sp. _____ Twin _____

Auxillary Equipment _____ 327

Personnel Nathan-Greg-Aaron

Auxillary Tools _____

Plugging or Sealing Materials: Type _____

_____ Gals. _____ lb.

Company Representative Chris B. Treater Nathan W.

TIME	PRESSURES		Total Fluid Pumped	REMARKS
	Tubing	Casing		
a.m./p.m.				
12:45		5.5"		On Location.
				Hole-3400'
				5.5"-3392' Centralizers-1,3,5,7,9
				Baffle-3349' Baskets-2,4
				Tag bottom with casing and pick up. Break circulation with mud pump.
				Circulate on bottom for 1 hour.
				Pump 600gal Mud Flush.
				Plug Rat Hole with 30sk 60/40poz
				Plug Mouse Hole with 20sk.
				Mix 125sk 60/40poz 2%gel 12% Salt .75% C-37 .25%C-12 .75% C-41p
				5#/sk Gilsonite.
				Wash out pump and lines.
				Displace with 81bbbls at 6.25bpm-500# Plug landed at 1100#
7:00				Release pressure. Float Held.
				Thank You!
				Nathan W.