



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1251868
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
-----------------------------------	-----------------	---

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: _____



1251868

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
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:				

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> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	L. D. Drilling, Inc.
Well Name	MAUCH 1-2
Doc ID	1251868

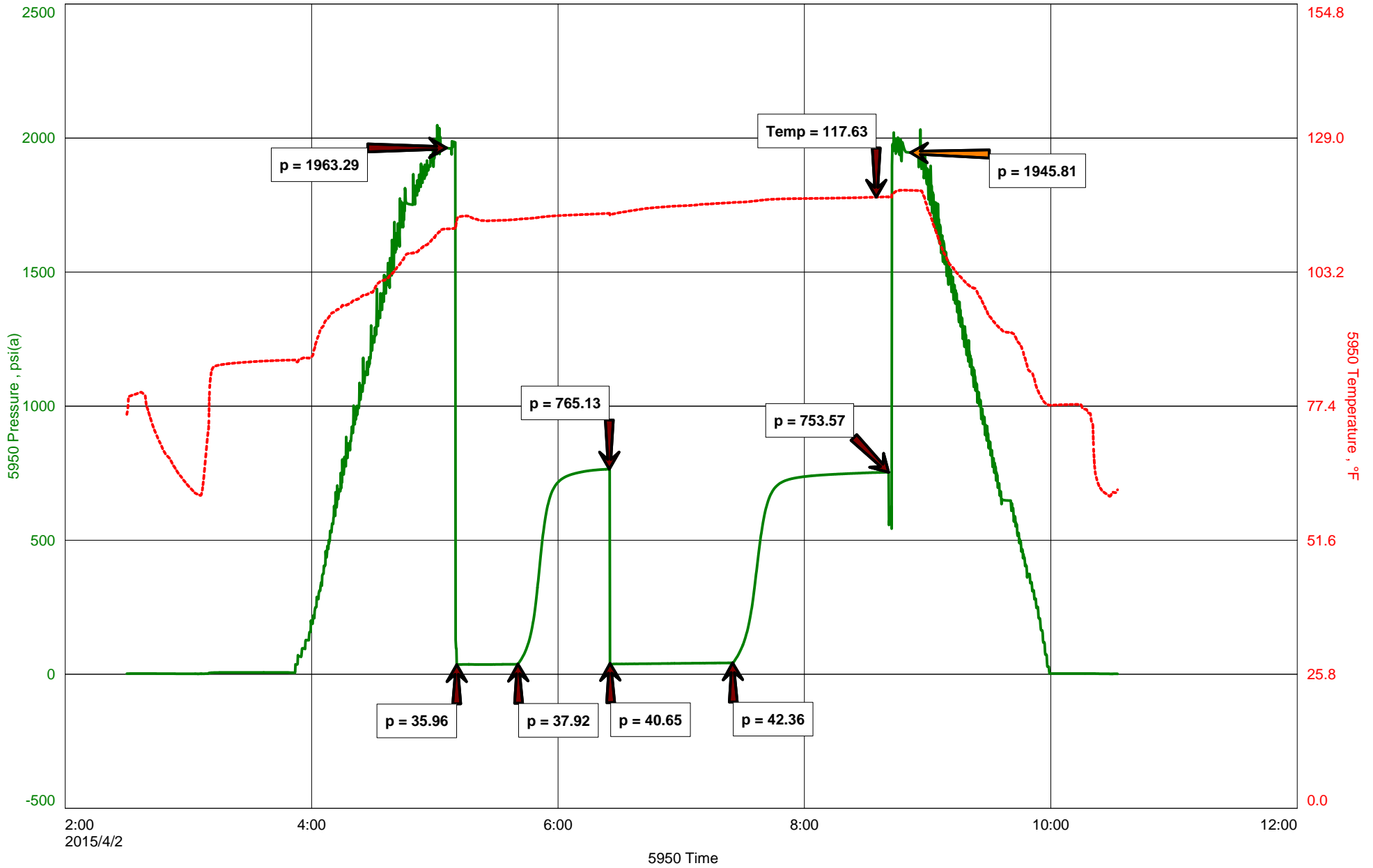
Tops

Name	Top	Datum
ANHYDRITE	1940	+622
BASE ANHYDRITE	1968	+594
STOTLER	3400	-838
HEEBNER	3824	-1262
LANSING	3864	-1302
STARK	4130	-1568
MARMATON	4228	-1666
FORT SCOTT	4376	-1814
CHEROKEE	4399	-1837
MISSISSIPPI	4489	-1927
MISSISSIPPI SPERGEN	4504	-1942

L.D. Drilling Inc
Dst #1 L/KC 'J' 4100-4130'
Start Test Date: 2015/04/02
Final Test Date: 2015/04/02

Mauch #1-2
Formation: Dst #1 L/KC 'J' 4100-4130'
Pool: Infield
Job Number: P0065

Mauch #1-2





Hoisington, Kansas

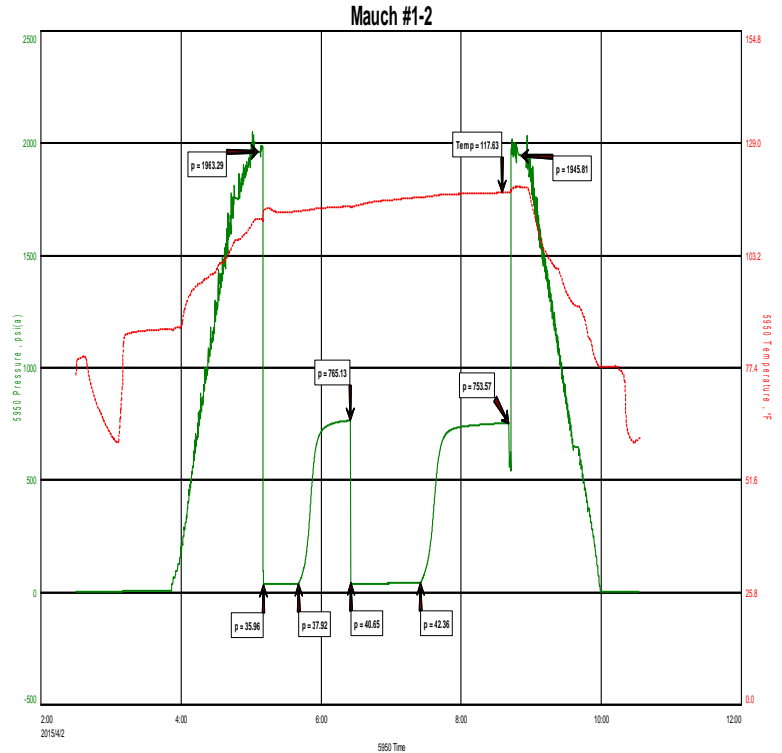
Michael Carroll
620-617-0368
carroll.dtlc@gmail.com

General Information

Company Name L.D. Drilling Inc

Contact L.D. Davis
Well Name Mauch #1-2
Unique Well ID Dst #1 L/KC 'J' 4100-4130'
Surface Location Sec2-18s-27w Lane County
Field NA
Well Type Vertical
Test Type Drill Stem Test
Well Operator L.D. Drilling Inc

Formation Dst #1 L/KC 'J' 4100-4130'
Well Fluid Type 01 Oil
Test Purpose Initial Test
Start Test Date 2015/04/02
Start Test Time 02:30:00
Final Test Time 10:32:00
Job Number P0065
Report Date 2015/04/02
Prepared By Michael Carroll



TEST RECOVERY

Remarks Recovery: 125' Gas In Pipe
 64' OCM 22%O 78%M

Total Fluid: 64'

Tool Sample: 35%O 65%M



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: Mauch#1-2Dst1

TIME ON: 0230
TIME OFF: 1032

Company L.D. Drilling Inc Lease & Well No. Mauch #1-2
Contractor L.D. Drilling Charge to L.D. Drilling Inc
Elevation 2562KB Formation L/KC 'J' Effective Pay _____ Ft. Ticket No. P0065
Date 4-2-15 Sec. 2 Twp. _____ 18 S Range _____ 27 W County _____ Lane _____ State KANSAS
Test Approved By Kim Shoemaker Diamond Representative Michael Carroll

Formation Test No. 1 Interval Tested from 4100 ft. to 4130 ft. Total Depth 4130 ft.
Packer Depth 4095 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 4100 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____
Top Recorder Depth (Inside) 4085 ft. Recorder Number 5950 Cap. 5000 P.S.I.
Bottom Recorder Depth (Outside) 4104 ft. Recorder Number 0230 Cap. 5000 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.
Mud Type Chem Viscosity 46 Drill Collar Length _____ 0 ft. I.D. 2 1/4 in.
Weight 9.0 Water Loss 8.8 cc. Weight Pipe Length _____ 0 ft. I.D. 2 7/8 in.
Chlorides 3100 P.P.M. Drill Pipe Length 4070 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number na Test Tool Length 30 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 30 ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: 2" BLOW-BUILT TO 3 1/4" IN 30 MINUTES NOBB
2nd Open: WSB-BUILT TO 3 1/2" IN 60 MINUTES NOBB

Recovered 125 ft. of GAS IN PIPE
Recovered 64 ft. of OCM 22%O 78%M
Recovered 64 ft. of TOTAL FLUID

Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Recovered _____ ft. of _____	Insurance
Remarks: <u>TOOL SLID 10' TO BOTTOM</u>	
TOOL SAMPLE: <u>35%O 65%M</u>	Total

Time Set Packer(s) 5:10A.M. A.M. P.M. Time Started Off Bottom 8:40A.M. A.M. P.M. Maximum Temperature 118

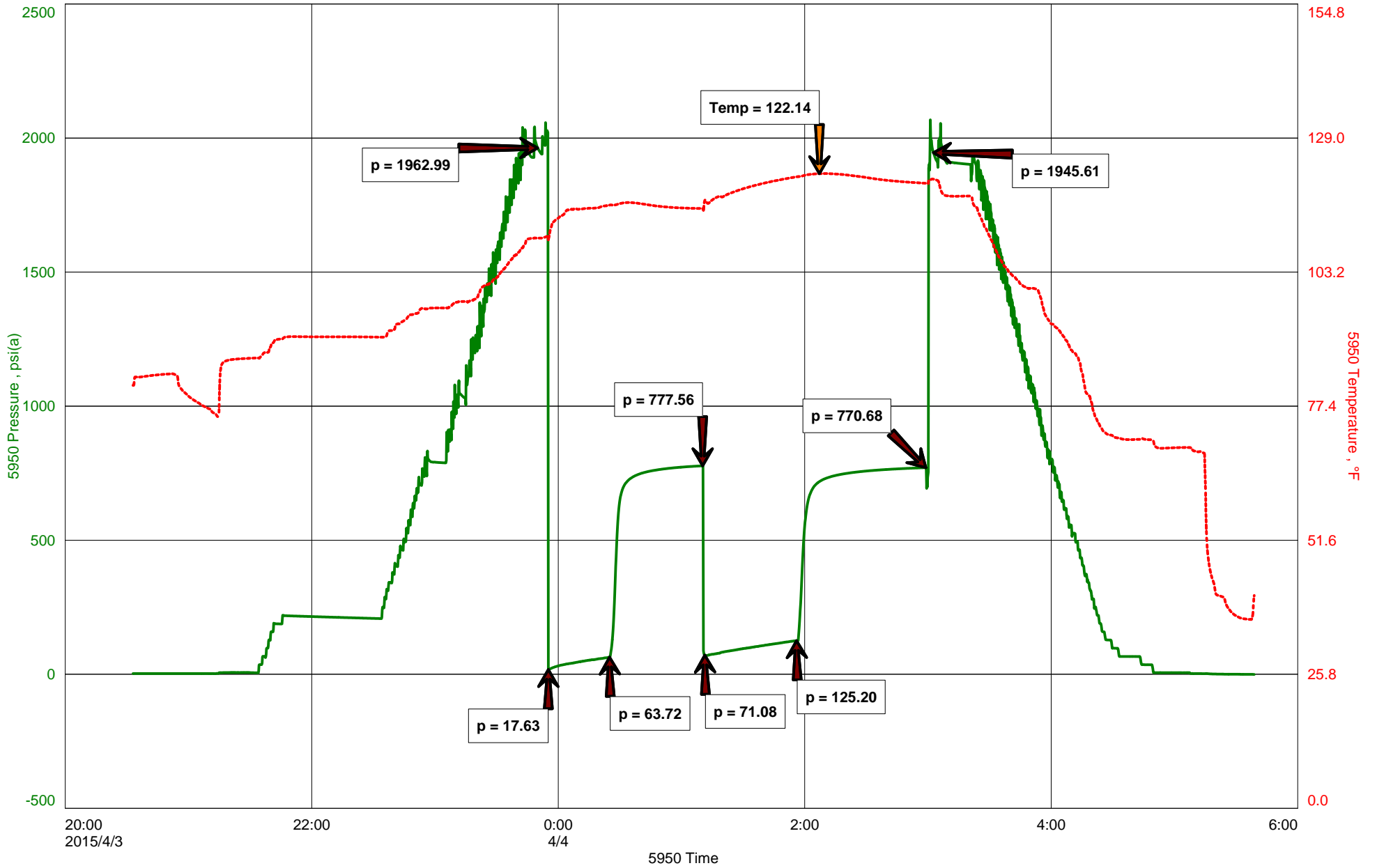
Initial Hydrostatic Pressure..... (A) 1963 P.S.I.
Initial Flow Period..... Minutes 30 (B) 36 P.S.I. to (C) 38 P.S.I.
Initial Closed In Period..... Minutes 45 (D) 765 P.S.I.
Final Flow Period..... Minutes 60 (E) 41 P.S.I. to (F) 42 P.S.I.
Final Closed In Period..... Minutes 75 (G) 754 P.S.I.
Final Hydrostatic Pressure..... (H) 1946 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

L.D. Drilling Inc
Dst #2 L/KC 'K' 4128-4155'
Start Test Date: 2015/04/02
Final Test Date: 2015/04/03

Mauch #1-2
Formation: Dst #2 L/KC 'K' 4128-4155'
Pool: Infield
Job Number: P0066

Mauch #1-2





Hoisington, Kansas

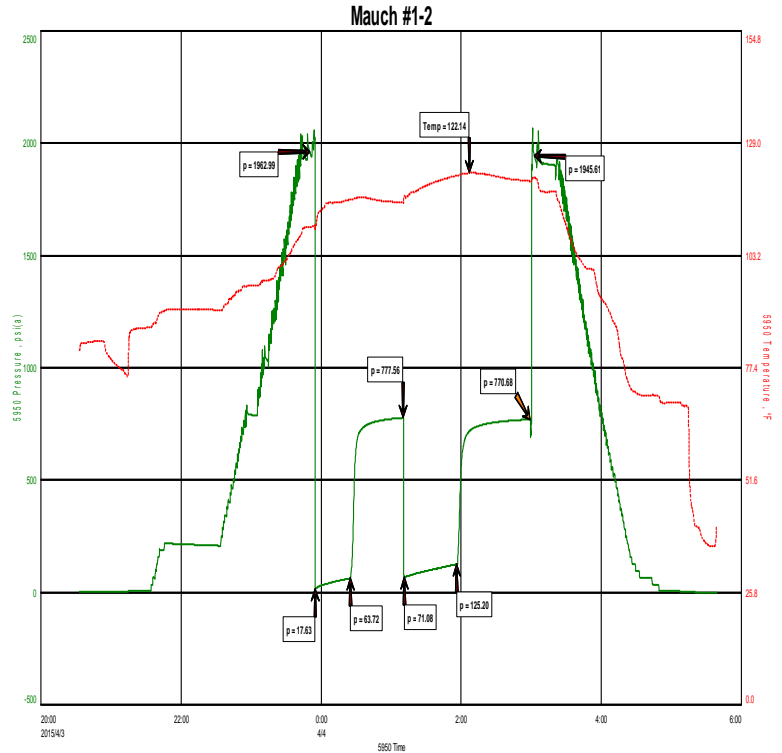
Michael Carroll
620-617-0368
carroll.dtlc@gmail.com

General Information

Company Name L.D. Drilling Inc

Contact L.D. Davis
Well Name Mauch #1-2
Unique Well ID Dst #2 L/KC 'K' 4128-4155'
Surface Location Sec2-18s-27w Lane County
Field NA
Well Type Vertical
Test Type Drill Stem Test
Well Operator L.D. Drilling Inc

Formation Dst #2 L/KC 'K' 4128-4155'
Well Fluid Type 01 Oil
Test Purpose Initial Test
Start Test Date 2015/04/02
Start Test Time 20:33:00
Final Test Time 05:39:00
Job Number P0066
Report Date 2015/04/02
Prepared By Michael Carroll



TEST RECOVERY

Remarks Recovery: 2676' Gas In Pipe

199' Clean Oil Gravity 37 @ 60 Degrees

46' GWCOM 10%G 30%O 10%W 50%M

40' VSLOCMW 1%O 79%W 20%M

Total Fluid: 285'

Tool Sample: 50%O 20%W 30%M

Chlorides 66000 PPM
RW .22 @ 40 Degrees
PH 7



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: Mauch#1-2Dst2

TIME ON: 2033 4-2
TIME OFF: 0539 4-3

Company L.D. Drilling Inc Lease & Well No. Mauch #1-2
Contractor L.D. Drilling Charge to L.D. Drilling Inc
Elevation 2562KB Formation L/KC 'K' Effective Pay _____ Ft. Ticket No. P0066
Date 4-2-15 Sec. 2 Twp. 18 S Range 27 W County _____ Lane _____ State KANSAS
Test Approved By Kim Shoemaker Diamond Representative Michael Carroll

Formation Test No. 2 Interval Tested from 4128 ft. to 4155 ft. Total Depth 4155 ft.
Packer Depth 4123 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 4128 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4113 ft. Recorder Number 5950 Cap. 5000 P.S.I.
Bottom Recorder Depth (Outside) 4132 ft. Recorder Number 0230 Cap. 5000 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chem Viscosity 47 Drill Collar Length 0 ft. I.D. 2 1/4 in.
Weight 9.1 Water Loss 8.0 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 2700 P.P.M. Drill Pipe Length 4098 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number na Test Tool Length 30 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 27 ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: 1/4" BLOW-BUILT TO BOB IN 7 MINUTES 1" BB
2nd Open: 1" BLOW-BUILT TO BOB IN 4 MINUTES 25 SECONDS 6" BB

Recovered 2676 ft. of GAS IN PIPE CHLORIDES 66000 PPM
Recovered 199 ft. of CLEAN OIL GRAVITY 37 @ 60 DEGREES RW .22 @ 40 DEGREES
Recovered 46 ft. of GWCOM 10%G 30%O 10%W 50%M PH 7
Recovered 40 ft. of VSLOCMW 1%O 79%W 20%M

Recovered <u>285</u> ft. of <u>TOTAL FLUID</u>	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: _____	Insurance
TOOL SAMPLE: <u>50%O 20%W 30%M</u>	Total

Time Set Packer(s) 11:55 P.M. A.M. P.M. Time Started Off Bottom 2:55 A.M. A.M. P.M. Maximum Temperature 122

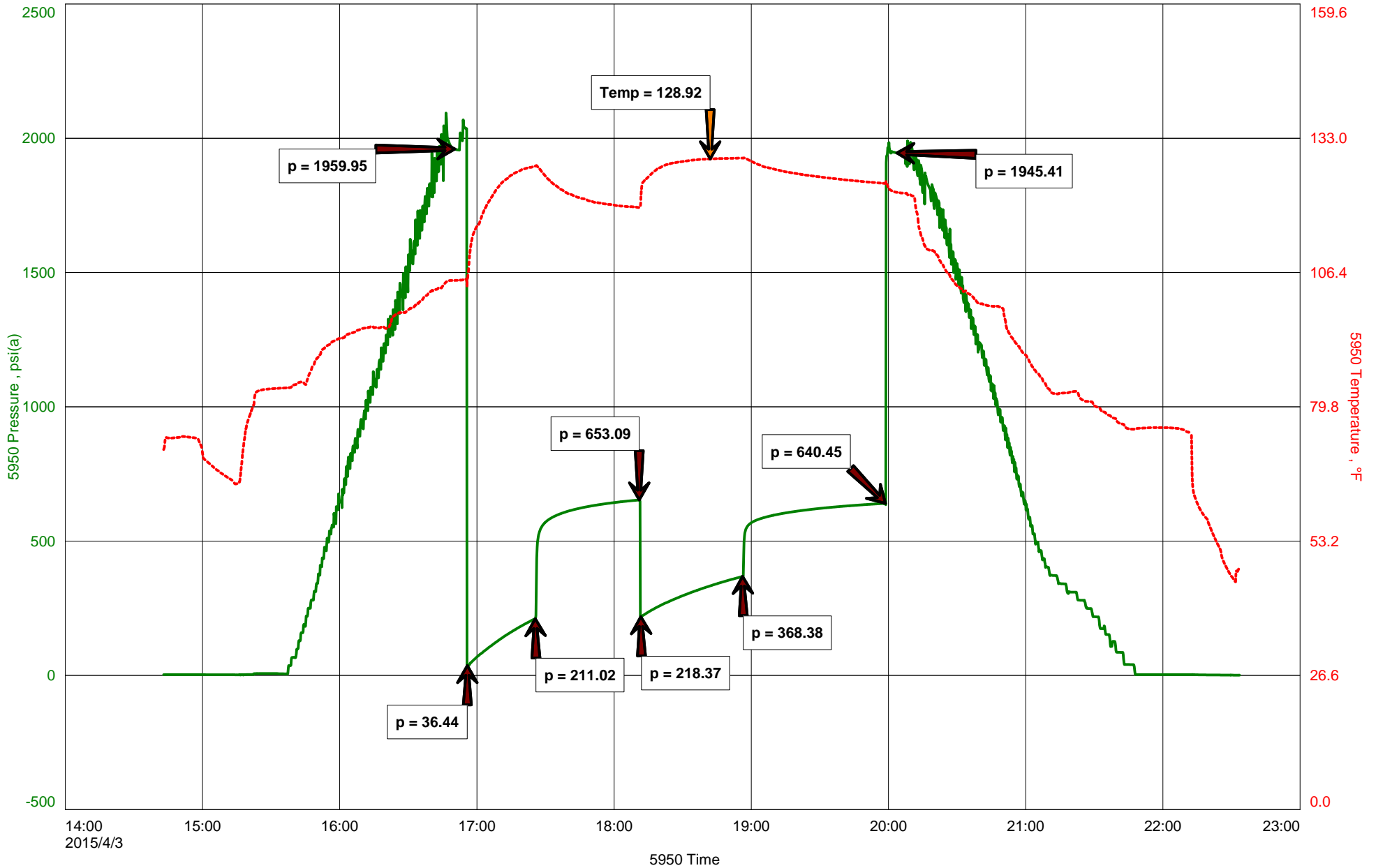
Initial Hydrostatic Pressure..... (A) 1963 P.S.I.
Initial Flow Period..... Minutes 30 (B) 18 P.S.I. to (C) 64 P.S.I.
Initial Closed In Period..... Minutes 45 (D) 778 P.S.I.
Final Flow Period..... Minutes 45 (E) 71 P.S.I. to (F) 125 P.S.I.
Final Closed In Period..... Minutes 60 (G) 771 P.S.I.
Final Hydrostatic Pressure..... (H) 1945 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

L.D. Drilling Inc
Dst #3 L/KC 'L' 4160-4190'
Start Test Date: 2015/04/03
Final Test Date: 2015/04/03

Mauch #1-2
Formation: Dst #3 L/KC 'L' 4160-4190'
Pool: Infield
Job Number: P0067

Mauch #1-2





Michael Carroll
 620-617-0368
 carroll.dtlc@gmail.com

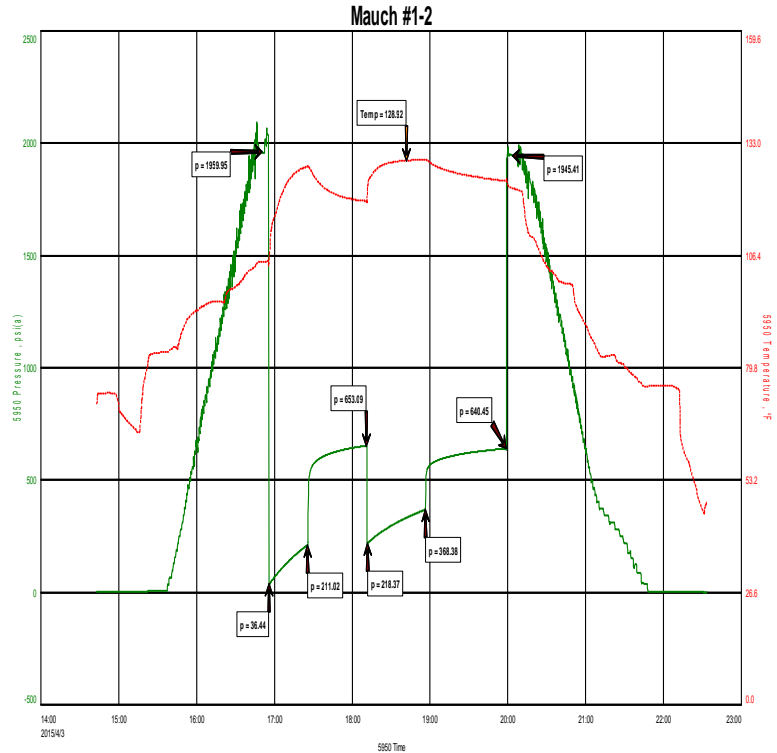
Hoisington, Kansas

General Information

Company Name L.D. Drilling Inc

Contact L.D. Davis
Well Name Mauch #1-2
Unique Well ID Dst #3 L/KC 'L' 4160-4190'
Surface Location Sec2-18s-27w Lane County
Field NA
Well Type Vertical
Test Type Drill Stem Test
Well Operator L.D. Drilling Inc

Formation Dst #3 L/KC 'L' 4160-4190'
Well Fluid Type 01 Oil
Test Purpose Initial Test
Start Test Date 2015/04/03
Start Test Time 14:43:00
Final Test Time 22:30:00
Job Number P0067
Report Date 2015/04/03
Prepared By Michael Carroll



TEST RECOVERY

Remarks Recovery: 63' Gas In Pipe

12' Clean Oil Gravity 36 @ 60 Degrees

116' GOCMW 2%G 2%O 56%W 40%M

189' GVSLOCMW 2%G 1%O 77%W 20%M

441' VSLOCMCW 1%O 97%W 2%M

Total Fluid: 758'

Tool Sample: 2%O 98%M

Chlorides 108000 PPM
 RW .13 @ 30 Degrees
 PH 7



DIAMOND TESTING
 P.O. Box 157
HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: Mauch#1-2Dst3

TIME ON: 1443
 TIME OFF: 2230

Company L.D. Drilling Inc Lease & Well No. Mauch #1-2
 Contractor L.D. Drilling Charge to L.D. Drilling Inc
 Elevation 2562KB Formation L/KC 'L' Effective Pay _____ Ft. Ticket No. P0067
 Date 4-3-15 Sec. 2 Twp. 18 S Range 27 W County Lane State KANSAS
 Test Approved By Kim Shoemaker Diamond Representative Michael Carroll

Formation Test No. 3 Interval Tested from 4160 ft. to 4190 ft. Total Depth 4190 ft.
 Packer Depth 4155 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
 Packer Depth 4160 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4145 ft. Recorder Number 5950 Cap. 5000 P.S.I.
 Bottom Recorder Depth (Outside) 4164 ft. Recorder Number 0230 Cap. 5000 P.S.I.
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chem Viscosity 54 Drill Collar Length 0 ft. I.D. 2 1/4 in.
 Weight 9.1 Water Loss 8.0 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
 Chlorides 3100 P.P.M. Drill Pipe Length 4130 ft. I.D. 3 1/2 in.
 Jars: Make STERLING Serial Number na Test Tool Length 30 ft. Tool Size 3 1/2-IF in.
 Did Well Flow? NO Reversed Out NO Anchor Length 30 ft. Size 4 1/2-FH in.
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: 1 "BLOW-BUILT TO BOB IN 5 MINUTES 15 SECONDS 1/2"BB
 2nd Open: 1 "BLOW-BUILT TO BOB IN 10 MINUTES 30 SECONDS 1"BB

Recovered 63 ft. of GAS IN PIPE CHLORIDES 108000 PPM
 Recovered 12 ft. of CLEAN OIL GRAVITY 36 @ 60 DEGREES RH .13 @ 30 DEGREES
 Recovered 116 ft. of GOCMW 2%G 2%O 56%W 40%M PH 7
 Recovered 189 ft. of GVSLOCMW 2%G 1%O 77%W 20%M
 Recovered 441 ft. of VSLOCMCW 1%O 97%W 2%M
 Recovered 758 ft. of TOTAL FLUID

Remarks: _____	Price Job
_____	Other Charges
_____	Insurance
TOOL SAMPLE: <u>2%O 98%W</u>	Total

Time Set Packer(s) 4:50 P.M. A.M. P.M. Time Started Off Bottom 7:50 P.M. A.M. P.M. Maximum Temperature 129

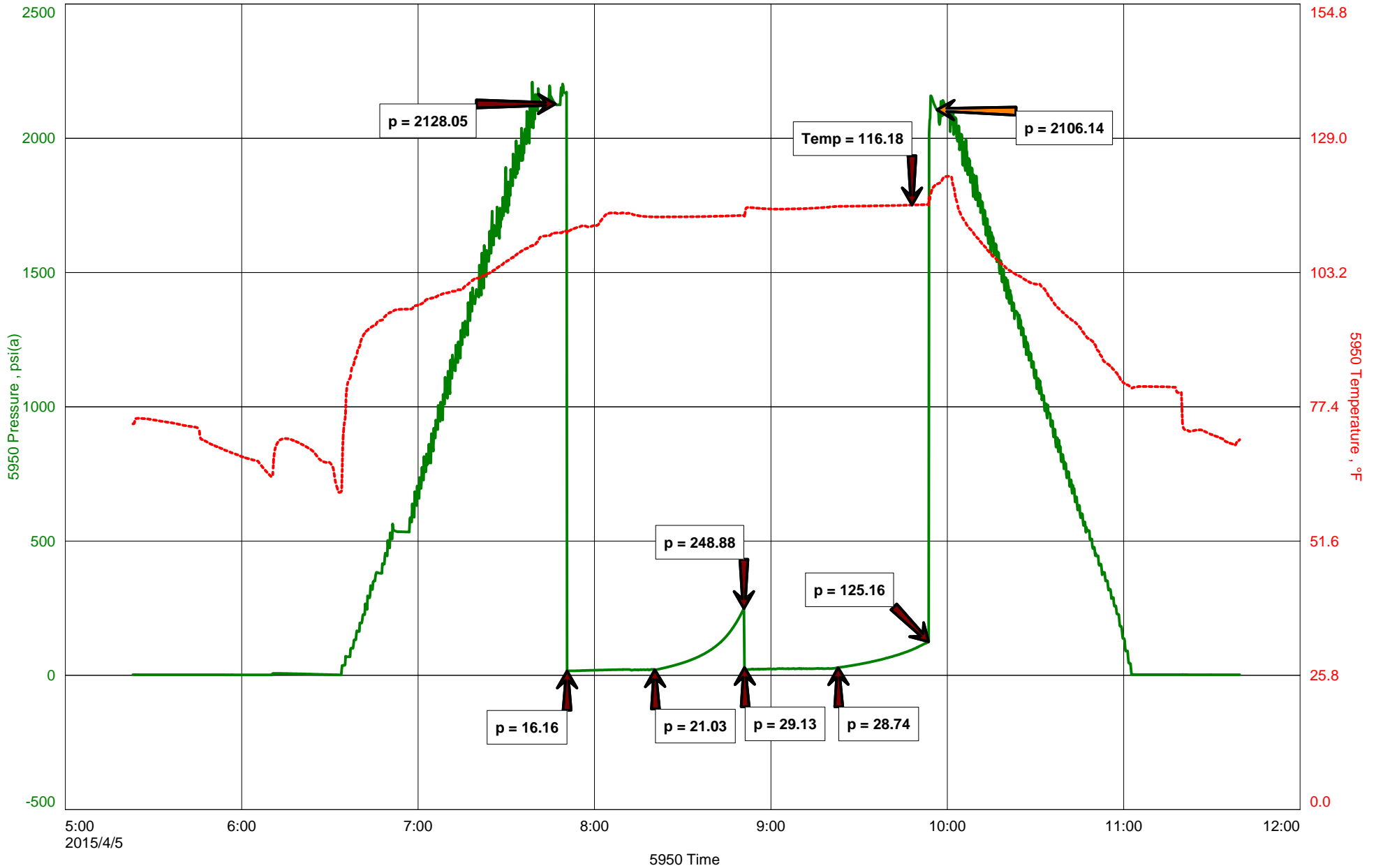
Initial Hydrostatic Pressure..... (A) 1960 P.S.I.
 Initial Flow Period..... Minutes 30 (B) 36 P.S.I. to (C) 211 P.S.I.
 Initial Closed In Period..... Minutes 45 (D) 653 P.S.I.
 Final Flow Period..... Minutes 45 (E) 218 P.S.I. to (F) 368 P.S.I.
 Final Closed In Period..... Minutes 60 (G) 640 P.S.I.
 Final Hydrostatic Pressure..... (H) 1945 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

L.D. Drilling Inc
Dst #4 Ft.Scott/Chero/John 4384-4462'
Start Test Date: 2015/04/05
Final Test Date: 2015/04/05

Mauch #1-2
Formation: Dst #4 Ft.Scott/Chero/John 4384-4462'
Pool: Infield
Job Number: P0068

Mauch #1-2





Hoisington, Kansas

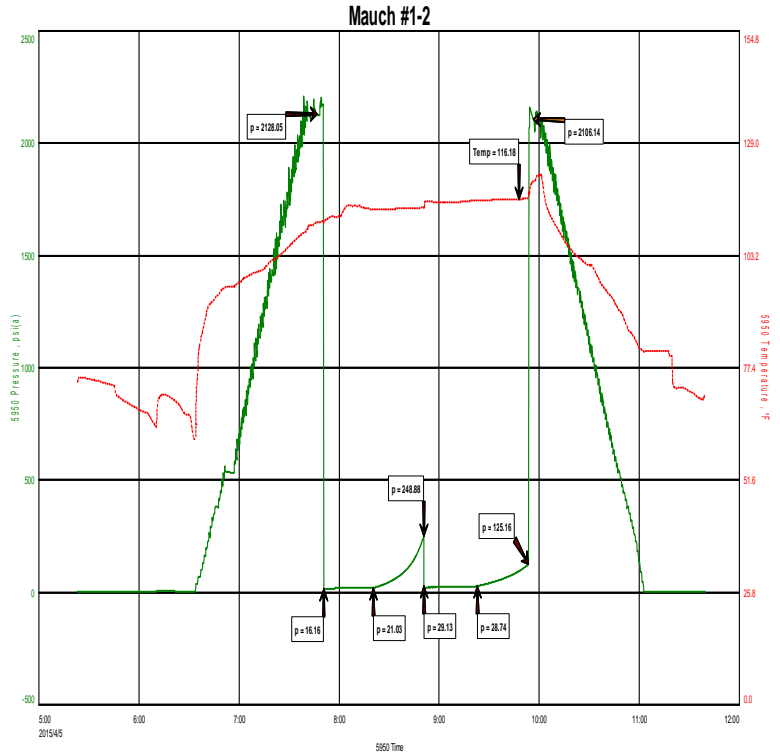
Michael Carroll
620-617-0368
carroll.dtlc@gmail.com

General Information

Company Name L.D. Drilling Inc

Contact	L.D. Davis
Well Name	Mauch #1-2
Unique Well ID	Dst #4 Ft.Scott/Chero/John 4384-4462'
Surface Location	Sec2-18s-27w Lane County
Field	NA
Well Type	Vertical
Test Type	Drill Stem Test
Well Operator	L.D. Drilling Inc

Formation	Dst #4 Ft.Scott/Chero/John 4384-4462'
Well Fluid Type	01 Oil
Test Purpose	Initial Test
Start Test Date	2015/04/05
Start Test Time	05:23:00
Final Test Time	11:40:00
Job Number	P0068
Report Date	2015/04/05
Prepared By	Michael Carroll



TEST RECOVERY

Remarks	Recovery:	36'	Gas In Pipe				
		27'	GOCM	2%G	5%O	93%M	
	Total Fluid:	27'					
	Tool Sample:	12%O	88%M				



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: Mauch#1-2Dst4

TIME ON: 0523
TIME OFF: 1140

Company L.D. Drilling Inc Lease & Well No. Mauch #1-2
Contractor L.D. Drilling Charge to L.D. Drilling Inc
Elevation 2562KB Formation Ft.Scott/Cherokee/Johnson Effective Pay _____ Ft. Ticket No. P0068
Date 4-5-15 Sec. 2 Twp. _____ 18 S Range _____ 27 W County _____ Lane _____ State KANSAS
Test Approved By Kim Shoemaker Diamond Representative _____ Michael Carroll

Formation Test No. 4 Interval Tested from 4384 ft. to 4462 ft. Total Depth 4462 ft.
Packer Depth 4379 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 4384 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4369 ft. Recorder Number 5950 Cap. 5000 P.S.I.
Bottom Recorder Depth (Outside) 4453 ft. Recorder Number 0230 Cap. 5000 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chem Viscosity 44 Drill Collar Length 0 ft. I.D. 2 1/4 in.
Weight 9.2 Water Loss 10.4 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 4700 P.P.M. Drill Pipe Length 4351 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number 11 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 78(14.5a) ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: 1/4" BLOW-BUILT TO 2" IN 30 MINUTES **NOBB**
2nd Open: 1/2" BLOW-BUILT TO 2 1/2" IN 30 MINUTES **NOBB**

Recovered 36 ft. of GAS IN PIPE
Recovered 27 ft. of GOCM 2%G 5%O 93%M
Recovered 27 ft. of TOTAL FLUID

Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Recovered _____ ft. of _____	Insurance
Remarks: _____	
TOOL SAMPLE: <u>12%O 88%M</u>	Total

Time Set Packer(s) 7:50A.M. A.M. P.M. Time Started Off Bottom 9:50A.M. A.M. P.M. Maximum Temperature 116

Initial Hydrostatic Pressure..... (A) 2128 P.S.I.
Initial Flow Period..... Minutes 30 (B) 16 P.S.I. to (C) 21 P.S.I.
Initial Closed In Period..... Minutes 30 (D) 249 P.S.I.
Final Flow Period..... Minutes 30 (E) 29 P.S.I. to (F) 29 P.S.I.
Final Closed In Period..... Minutes 30 (G) 125 P.S.I.
Final Hydrostatic Pressure..... (H) 2106 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

KIM B. SHOEMAKER

CONSULTING GEOLOGIST

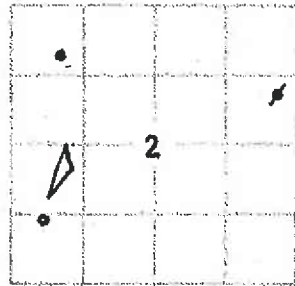
316-684-9709 * WICHITA, KS

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY <u>L. D. DRILLING, INC.</u>	ELEVATIONS
LEASE <u>51-2 MAUCH</u>	KB <u>2562</u>
FIELD <u>WILDCAT</u>	DF _____
LOCATION <u>1302' FSL & 565' FWL</u>	GL <u>2557</u>
SEC <u>2</u> TWP <u>18s</u> RGE <u>27w</u>	Measurements Are All From <u>2562 KB</u>
COUNTY <u>LANE</u> STATE <u>KANSAS</u>	CASING
CONTRACTOR <u>L. D. DRILLING, INC.</u>	SURFACE <u>8 5/8" @ 260'</u>
SPUD <u>3-26-15</u> COMP <u>4-6-15</u>	PRODUCTION <u>5 1/2" @</u>
RTD <u>4589</u> LTD <u>4589</u>	ELECTRICAL SURVEYS
MUD UP <u>3445</u> TYPE MUD <u>CHEMICAL</u>	DUAL IND, DENS-N, MICRO
SAMPLES SAVED FROM _____ <u>3600</u> TO <u>4589</u>	
DRILLING TIME KEPT FROM _____ <u>3300</u> TO <u>4589</u>	
SAMPLES EXAMINED FROM _____ <u>3600</u> TO <u>4589</u>	
GEOLOGICAL SUPERVISION FROM _____ <u>3800</u> TO <u>4589</u>	
GEOLOGIST ON WELL <u>KIM B. SHOEMAKER</u>	

FORMATION TOPS	LOG	SAMPLES
ANHYDRITE	1940+622	1943+619
B/ANH.	1968+594	1971+591
STOTLER	3400-838	3400-838
HEEBNER	3824-1262	3828-1266
LANSING	3864-1502	3868-1306
STARK	4130-1568	4132-1570
MARMATON	4228-1666	4228-1666
FORT SCOT	4376-1814	4378-1816
CHELDKEE	4399-1837	4400-1838
MISSISSIPPI	4489-1927	4492-1930
MISS. SPERGEN	4504-1942	4504-1942



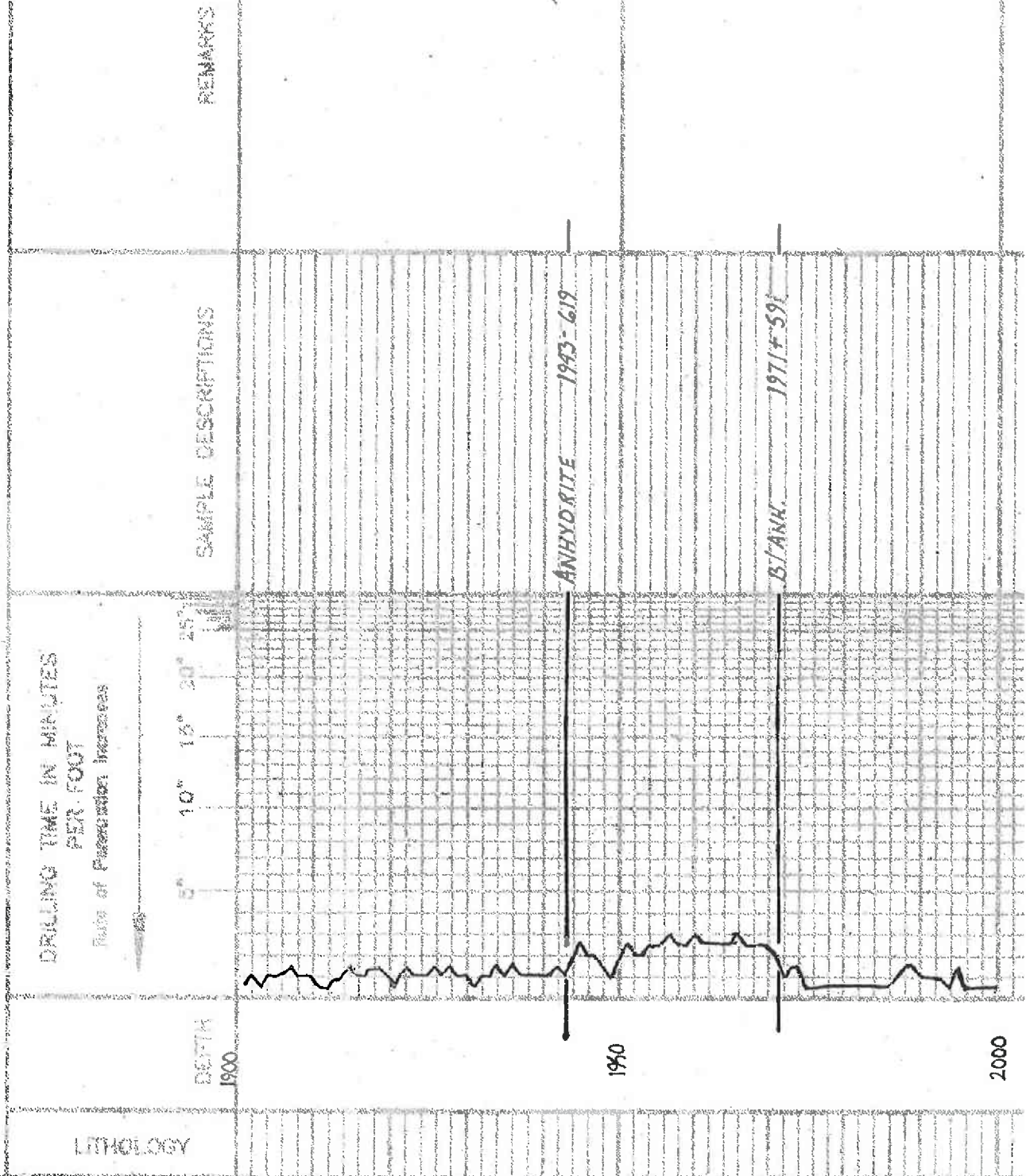
REMARKS

API: 15-101-22562

3-26-15 SPUD
 3-27 @ 263'
 3-28 @ 1252'
 3-29 @ 2335'
 3-30 @ 2960'
 3-31 @ 3480'
 4-1 @ 3950'
 4-2 @ 4130'
 4-3 @ 4190'
 4-4 @ 4250'
 4-5 @ 4462'
 4-6 @ 4589'

LEGEND

- Anhydrite
- Gypsiferous
- Sandstone
- Shale
- Carbonaceous
- Limestone
- Dolomite
- Chert



2000

3300

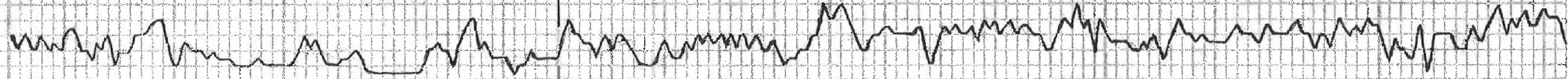
3400

3500

SIOTLER 3400-838

Samples are tagged

MS 51
WT 8.6



WT. 8.6
No. 7.4
CNS 600

3600

3700

3800

3900

ls. w. chly. 1500 Foss.

ls. w. Foss. Sil. Calcite

ls. w. chly.

ls. Tr. L. Br. 1500 Foss. Sil. A

ls. w. chly. Foss. Calcite

Sh. G.

ls. Tr. Foss. Sil. Calcite

ls. Br. 1500 Foss.

Sh. G. Br.

ls. Tr. Br. 1500 Foss.

Sh. G. Sil. G.

ls. w. Sil. Chly.

ls. Foss. Foss.

ls. w. chly. Foss. w. chly.

A. G. Sil. Foss.

ls. Tr. G. Sil. Foss. Sil. Chly.

Sh. G.

ls. w. chly. w. Sil. w.

ls. w. chly. 1500 Foss.

ls. Tr. G. Foss. Calcite

ls. Tr. Br. Foss. Sil. Foss.

ls. Tr. Br. Sil. Foss. Sil. A. Sil. Chly.

✓ Herb. Log

HEEBNER 3828-1266
Sh. G. Br. 1500 Foss.

Sh. G. Br.

TORONTO

ls. w. Sil. Foss. Sil. A

ls. w. Foss. Sil. A

✓ L. G. Log

Sh. G. Br.

JANESVILLE 3868-1306

ls. w. chly. 1500 Foss.

A. W.

ls. w. Tr. w. Sil. A

ls. Tr. Sil. Foss. Sil. A. Sil. Calcite

Sh. G.

Sh. G. Sil. G.

ls. Tr. Sil. Foss. Sil. A



BASICSM
ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

2-18-27

FIELD SERVICE TICKET
1718 11946 A

DATE _____ TICKET NO. _____

DATE OF JOB 4-6-15 DISTRICT Pratt		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/> CUSTOMER ORDER NO.:				
CUSTOMER LD Drilling, inc		LEASE MARCH WELL NO. 102				
ADDRESS		COUNTY LANE STATE KS				
CITY STATE		SERVICE CREW MATTAL, McGraw, KAISER, Gibbs				
AUTHORIZED BY		JOB TYPE: CNW 5 1/2 2 stage long string				
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED 4-6-15 DATE PM TIME 8:00
19905	1.5					ARRIVED AT JOB AM 2:15
19860	.25					START OPERATION AM 4:33
19862	.5					FINISH OPERATION AM 6:17
						RELEASED AM 7:00
						MILES FROM STATION TO WELL 100

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: *[Signature]*
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP 106	AA-2 cmf	sq	150		2,550 00
CP 101	A-con blend cmf	sq	300		5,400 00
CP 103	60/40 Poz	sq	30		360 00
CC 102	cellofibre	lb	113		418 10
CC 109	Calcium chloride	lb	846		888 30
CC 111	Salt	lb	816		408 00
CC 113	SYPsum	lb	705		528 75
CC 129	Fla-322	lb	113		847 50
CC 201	Gilsonite	lb	900		603 00
CF 401	Two stage cmf collar	ea	1		6,100 00
CF 601	Latch Down Plug + Assembly	ea	1		850 00
CF 1251	Auto fill Float shoe	ea	1		360 00
CF 1651	turbolizer	ea	7		770 00
CF 1901	Bags	ea	2		580 00
CC 151	Mud flush	gal.	1,000		1,500 00

SUB TOTAL

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$
MATERIALS	%TAX ON \$

TOTAL

69

SERVICE REPRESENTATIVE Mike Mattal	THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: <i>[Signature]</i>
---	--

(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

Customer LD Drilling, inc	Lease No.	Date 4-6-15
Lease MAUCH	Well # 1-2	
Field Order # 11946	Station Pratt	Casing 5 1/2
	Depth 4587	County LANE
Type Job Cnw 5 1/2 2 stage long string	Formation	Legal Description 2-18-27

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size 5 1/2	Tubing Size	Shots/Ft		Fluid 150 SKS	RATE AA-2	PRESS LD Blend	ISIP	
Depth 4587	Depth	From	To	Pre Pad 300 SKS	Max A-con	3% cc 1/4" cr	5 Min.	
Volume 11.9	Volume	From	To	Pad 30 SKS	Min 60/40 POZ		10 Min.	
Max Press 1,500	Max Press	From	To	Frac	Avg		15 Min.	
Well Connection P.C.	Annulus Vol.	From	To	DUTBOL-1967	HHP Used		Annulus Pressure	
Plug Depth 4537	Packer Depth	From	To	Flush 111.3	Gas Volume		Total Load	

Customer Representative LD	Station Manager Kevin Goldley	Treater Mike Mattal
Service Units 37586	77686	19905
19903	19866	19960
19862		
Driver Names MATTAL	McGraw	Kais
		Gibson

Time	Casing Pressure	Tubing Pressure	Bbbs. Pumped	Rate	Service Log
2:15					ON LOCATION / Safety meeting
					Run 5 1/2 14# used casing BASKET ON BOTTOM, 18+68
					Turbolizers on 2, 5, 8, 11, 14, 17, 67 #
3:45					CSNG ON BOTTOM - BASKET - 18, 68 DV-68
3:50					HOOK TO CSNG / Break circ. w. Rig 1967
4:33	200		24	5	Pump 24 bbl mud flush
4:37	200		5	5	Pump 5 bbl water
4:39	200		41	5	Mix 150 SKS AA-2
4:45			4	3	WASH Pump + Line, Drop Plug
4:49	200			6	START WATER DISPLACEMENT
4:57	200		70	6	START mud displacement
5:00	300		80	5.5	LIFT pressure
5:02	400		101	3	slow rate
5:08	1500		111.3		plug down, release + hold
5:10			7		plug RAT hit
5:10					DROP OPENING TOOL
5:25	700				open tool with pump truck 700 PSI
5:33	150		148	5	Mix 300 SKS A-con
6:04			4	3	WASH Pump + Line, Drop Plug
6:07	300			6	START DISPLACEMENT (CIRC. 25 bbl)
6:14	400		38	3	slow rate (CEMENT TO BIT)
6:17	1500		48		plug down, release + hold JOB COMPLETE

L. D. DRILLING, INC.

7 SW 26th Avenue
GREAT BEND, KS 67530

Customer _____ Order _____

Lease _____ Date _____

Description of Pipe _____

Amount _____

Jts.	Ft.	Ins.	Ft.	Ins.	Ft.	Ins.	Ft.	Ins.	Ft.	Ins.
1	30	09	43	27	42	83	43	28		
2	32	93	43	36	43	49	43	27		
3	30	22	38	76	42	59	41	59		
4	39	31	43	28	39	06	41	96		
5	42	31	43	33	40	06	43	27		
6	31	39	40	19	43	29	43	27		
7	31	43	43	29	39	98	33	51		
8	39	91	43	37	42	—	30	78		
9	30	76	40	25	38	—	43	29		
10	28	88	43	38	43	30	43	37		
11	30	54	43	36	38	63	40	78		
12	32	26	43	35	43	33	41	89		
13	30	56	40	14	43	32	43	32		
14	30	61	39	19	42	50	43	25		
15	30	29	43	34	40	07	41	92		
16	30	81	38	82	31	74	42	08		
17	42	01	43	36	41	66	42	90		
18	31	22	43	35	42	35	38	57		
19	39	79	43	38	42	55	41	91		
20	31	79	43	37	41	87	42	03		
21	32	10	43	36	40	17	43	24		
22	32	26	43	38	35	02	43	39		
23	40	37	43	39	40	09	41	96		
24	32	60	39	72	42	33	41	54		
25	32	73	43	31	42	65	42	62	—	OUT
26	30	55	42	69	42	27	40	82		
27	43	37	43	36	43	27	41	98	—	OUT
28	38	48	43	41	43	26	42	54	—	OUT
29	43	34	43	42	42	02	8	68	—	LS
30	43	23	39	25	41	95	13	72		
Total	1016	14	1268	43	1244	55	1186	58		

TOTAL PIECES _____ LENGTH _____ FEET _____ INCHES _____

RECEIVED BY _____ TALLIED BY _____

TD-4589'

SET 5 1/2 AT 4587'
DU TOOL AT 1967' TOP OF #68
CENT. 2-5-8-11-14-17-67
BASKET - BOTTOM 18, BOTTOM 68
FLOAT SHOE, LATCH BAFFLE IN 30' SHOE FT.

BOTTOM STAGE

24 bbl mud pump

5 bbl H₂O

41 bbl CNT 14.8

WASH LINE

DROP PUG

11.3 - DISP PUG DOWN

70 bbl - H₂O

41.3 bbl - MUD

PUG RAT HOLE

OPEN DU TOOL

NEED
1.75 bbl H₂O
41 bbl - MUD

TOP STAGE

148 bbl - A-COW 11.6th

WASH LINE

DROP PUG

48 bbl - DISP PUG DOWN

NEED 2.75 bbl H₂O

Customer <i>L.O. Dally</i>	Lease No.	Date <i>03-27-15</i>	
Lease <i>MAUCH</i>	Well # <i>1-2</i>		
Field/Order # <i>11225</i>	Station <i>PRATT KS</i>	Casing <i>8 5/8</i>	Depth <i>200'</i>
Type Job <i>CNW 8 5/8 surface</i>	Formation	County <i>LAKE</i>	State <i>KS</i>
		Legal Description <i>2-18-27</i>	

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP	
<i>8 5/8</i>				Pre Pad	Max		5 Min.	
Depth <i>260</i>	Depth	From	To	Pad	Min		10 Min.	
Volume <i>15</i>	Volume	From	To	Frac	Avg		15 Min.	
Max Press <i>200</i>	Max Press	From	To		HHP Used		Annulus Pressure	
Well Connection <i>SWR</i>	Annulus Vol.	From	To	Flush	Gas Volume		Total Load	
Plug Depth <i>240</i>	Packer Depth	From	To					

Customer Representative	Station Manager <i>DAVE SUTT</i>	Treater <i>Robert [Signature]</i>
-------------------------	-------------------------------------	--------------------------------------

Service Units	<i>27900</i>	<i>27463</i>	<i>15960</i>	<i>19862</i>					
Driver Names	<i>Sutton</i>	<i>HANCOCK</i>	<i>F. G. S. D.</i>						

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<i>10:50</i>					<i>run 60'</i>
					<i>Run 8 5/8 surface</i>
<i>1:10</i>					<i>drilling on bottom</i>
<i>1:15</i>					<i>haul by acid</i>
<i>1:25</i>			<i>3</i>	<i>3</i>	<i>ST SPACER</i>
				<i>45</i>	<i>mix cont 175 ^{total pot} 3 1/2 cc 1 1/2 CF</i>
			<i>37</i>		<i>cont mixed</i>
				<i>3</i>	<i>st disp</i>
<i>1:45</i>			<i>15</i>		<i>plug down</i>
					<i>circ 10 BBL cont pit</i>
					<i>Job Complete</i>
					<i>[Signature]</i>