

DIAMOND TESTING, LLC

TESTER : TIM VENTERS
CELL # 620-388-6333

General Information

Company Name	RITCHIE EXPLORATION, INC.	Job Number	T559
Contact	JUSTIN CLEGG	Representative	TIM VENTERS
Well Name	LUEBBERS UNIT #1	Well Operator	RITCHIE EXPLORATION, INC.
Unique Well ID	DST #4, LKC "H&I", 4170-4240	Report Date	2016/09/06
Surface Location	SEC 26-15S-36W, LOGAN CO. KS.	Prepared By	TIM VENTERS
Well License Number			
Field	WILDCAT		
Well Type	Vertical		

Test Information

Test Type	CONVENTIONAL
Formation	DST #4, LKC "H&I", 4170-4240
Well Fluid Type	01 Oil
Test Purpose	Initial Test

Start Test Date	2016/09/06	Start Test Time	14:35:00
Final Test Date	2016/09/06	Final Test Time	21:39:00

Gauge Name	5504
------------	------

Test Results

RECOVERED: 45' M W/TR. O, TRACE OIL <1%, 100% MUD
125' WCM, 22% WATER, 78% MUD
125' MCW, 63% WATER, 37% MUD
310' SMCW, 86% WATER, 14% MUD
605' TOTAL FLUID

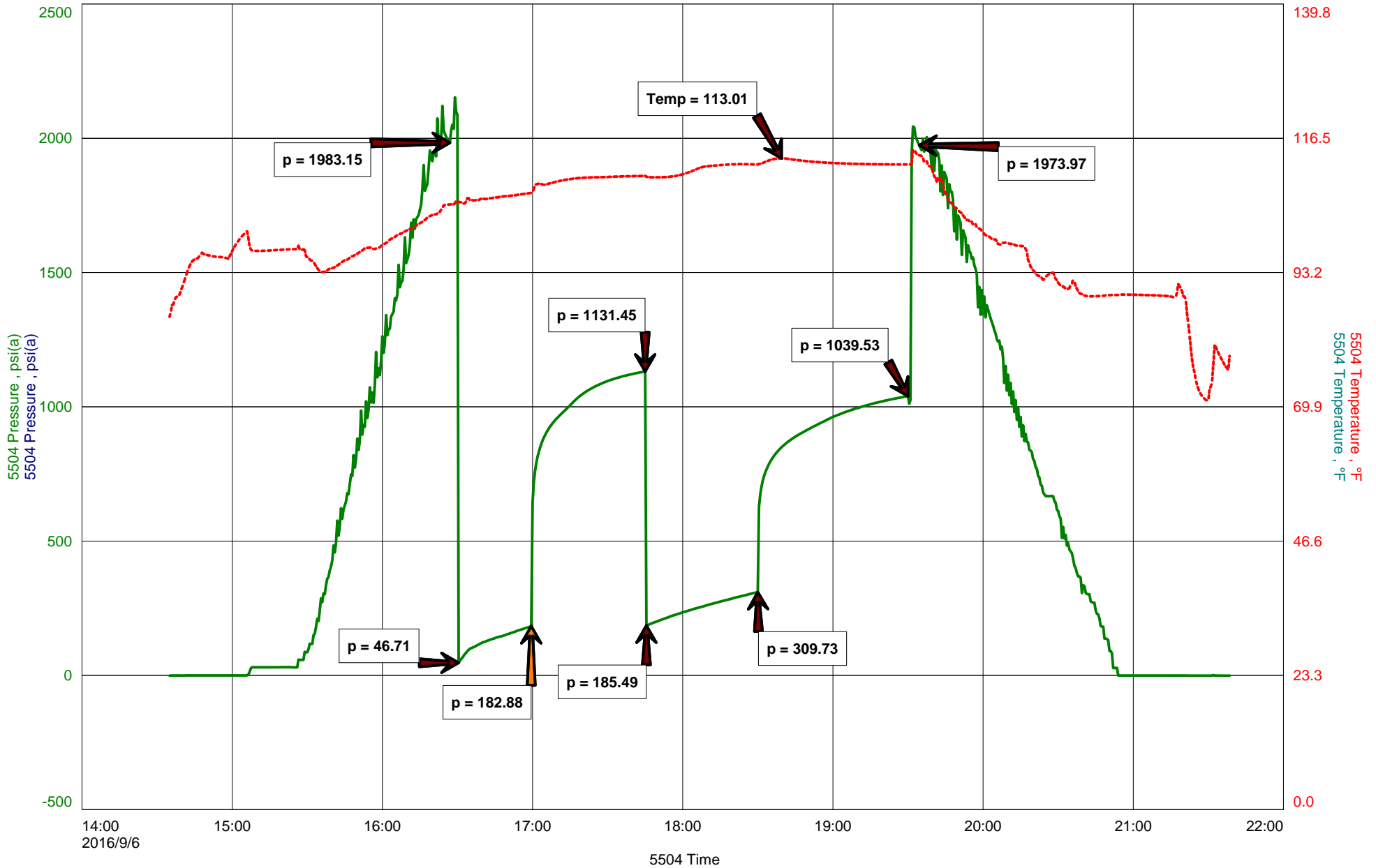
TOOL SAMPLE: 97% WATER, 3% MUD

CHLORIDES: 27,000 ppm
PH: 7.5
RW: .30 @ 76 deg.

RITCHIE EXPLORATION, INC.
DST #4, LKC "H&I", 4170-4240
Start Test Date: 2016/09/06
Final Test Date: 2016/09/06

LUEBBERS UNIT #1
Formation: DST #4, LKC "H&I", 4170-4240
Pool: WILDCAT
Job Number: T559

LUEBBERS UNIT #1





DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: LUEBBERSUNIT1DST4

TIME ON: 14:35
TIME OFF: 21:39

Company RITCHIE EXPLORATION, INC. Lease & Well No. LUEBBERS UNIT #1
Contractor WW DRILLING, LLC RIG #2 Charge to RITCHIE EXPLORATION, INC.
Elevation 3276 KB Formation LKC "H&I" Effective Pay _____ Ft. Ticket No. T559
Date 9-6-16 Sec. 26 Twp. _____ 15 S Range _____ 36 W County LOGAN State KANSAS
Test Approved By JOHN GOLDSMITH Diamond Representative TIM VENTERS

Formation Test No. 4 Interval Tested from 4170 ft. to 4240 ft. Total Depth 4240 ft.
Packer Depth 4165 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 4170 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____
Top Recorder Depth (Inside) 4151 ft. Recorder Number 5504 Cap. 5,000 P.S.I.
Bottom Recorder Depth (Outside) 4237 ft. Recorder Number 11029 Cap. 5,025 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEMICAL Viscosity 48 Drill Collar Length 119 ft. I.D. 2 1/4 in.
Weight 9.1 Water Loss 9.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 5,000 P.P.M. Drill Pipe Length 4018 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number 4 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 38 ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. ^{32' DP IN ANCHOR} Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: WEAK SURFACE BLOW, BUILDING, REACHING BOB 14 MIN. (NO BB)
2nd Open: WEAK SURFACE BLOW, BUILDING, REACHING BOB 18 MIN. (NO BB)

Recovered 45 ft. of M W/TR. O, TRACE OIL < 1%, 100% MUD
Recovered 125 ft. of WCM, 22% WATER, 78% MUD
Recovered 125 ft. of MCW, 63% WATER, 37% MUD
Recovered 310 ft. of SMCW, 86% WATER, 14% MUD
Recovered 605 ft. of TOTAL FLUID

Recovered _____ ft. of _____	CHLORIDES: 27,000 ppm	Price Job
Remarks: _____	PH: 7.5	Other Charges
	RW: .30 @ 76 deg.	Insurance
TOOL SAMPLE: 97% WATER, 3% MUD		Total

Time Set Packer(s) 4:30 PM ^{A.M.}/_{P.M.} Time Started Off Bottom 7:30 PM ^{A.M.}/_{P.M.} Maximum Temperature 113 deg.
Initial Hydrostatic Pressure..... (A) 1983 P.S.I.
Initial Flow Period..... Minutes 30 (B) 47 P.S.I. to (C) 183 P.S.I.
Initial Closed In Period..... Minutes 45 (D) 1131 P.S.I.
Final Flow Period..... Minutes 45 (E) 185 P.S.I. to (F) 310 P.S.I.
Final Closed In Period..... Minutes 60 (G) 1040 P.S.I.
Final Hydrostatic Pressure..... (H) 1974 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.