



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1096722
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: _____



1096722

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> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Richland Oil Investments, LLC
Well Name	BRASSFIELD 1-29
Doc ID	1096722

All Electric Logs Run

Dual Compensated Porosity
Dual Induction
Microresistivity
Sector Cement Bond

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

October 09, 2012

Keith E. Lambert
Richland Oil Investments, LLC
608 E. 1ST
PO BOX 166
PALCO, KS 67657

Re: ACO1
API 15-065-23792-00-00
BRASSFIELD 1-29
SW/4 Sec.29-09S-21W
Graham County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Keith E. Lambert



SWIFT Services, Inc.

CHARGE TO: Rickroad Oil Investments LLC
 ADDRESS: PO Box 166
 CITY, STATE, ZIP CODE: Palco, KS.

TICKET No 21877

PAGE 1 OF 2

1. SERVICE LOCATIONS: Hays, KS
 2. Well/PROJECT NO: 1-29
 3. Well Type: South Wind Delg #2
 4. Referral Location: Development
 Lease: Brassfield
 County/Parish: Graham
 RIG NAME NO.
 STATE: KS
 CITY: Location
 DATE: 8-29-12
 OWNER: Same

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	LOC	ACCT	DF	DESCRIPTION	QTY	UM	QTY	UM	UNIT PRICE	AMOUNT
575					MILEAGE #111	50	mi			6.00	300.00
579					Pump Charge (2-stage)	1	ea			1850.00	1850.00
221					KCL	4	gal			45.00	180.00
281					Mudflash	500	gal			1.25	625.00
290					D-Air	4	gal			35.00	140.00
402					Centrifizers	8	ea			70.00	560.00
403					Baskets	3	ea			250.00	750.00
407					Insert Float Shoe w/ Bill	1	ea			350.00	350.00
408					DV Tool w/ Plug set	1	ea			3000.00	3000.00
417					D.V. L.D. Plug & Baffle	1	ea			200.00	200.00

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

X
 DATE SIGNED: 8-29-12
 TIME SIGNED: 2:25
 A.M.
 P.M.

REMIT PAYMENT TO:
 SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560
 785-798-2300

SURVEY	AGREE	UN-DECIDED	DIS-AGREE	PAGE TOTAL	TOTAL
OUR EQUIPMENT PERFORMED WITHOUT BREADDOWN? WE UNDERSTOOD AND MET YOUR NEEDS? OUR SERVICE WAS PERFORMED WITHOUT DELAY? WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY? ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Page 2 Subtotal 7875 8027	16,830.84
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	GRHAM TAX 7.55%	84

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES: The customer hereby acknowledges receipt of the materials and services listed on this ticket.
 APPROVAL: *Mich Stokes*
 SIGNATURE: *Mich Stokes*
 DATE: 8-29-12
 TIME: 2:25
 AM/PM: P.M.
 TOTAL: 16,830.84
 Thank You!



PO Box 466.
Ness City, KS 67560
Of: 785-798-2300

TICKET CONTINUATION

TICKET No. 21877

CUSTOMER
Richard Oil Investment LLC

WELL # 1-29 Brassfield

DATE 8-29-12

PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	WELL				DATE	UNIT PRICE	AMOUNT	
		LOC	ACCT	DR			QTY	UM	QTY	UM				
325		2				Stacked Cement	150	sks				13.50	2025.00	
330		2				SMD Cement	200	sks				16.50	3300.00	
276		2				Floccle	100	#				20.00	2000.00	
283		2				SALT	250	#				2.00	500.00	
284		2				Calseal	7	sks				35.00	245.00	
286		2				Halad-1	70	#				7.50	525.00	
581		2				SERVICE CHARGE						2.00	700.00	
583		2				MILEAGE CHARGE						1.00	882.00	
SERVICE CHARGE MILEAGE CHARGE TOTAL WEIGHT 35272 LOADED MILES 50 CUBIC FEET 3505 sks TON MILES 882														
CONTINUATION TOTAL												8027.00		

CUSTOMER
Richland Oil Inv. LLC

WELL NO. 41-29

LEASE
Brassfield

JOB TYPE
2-stage

TICKET NO.
21877

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1745							an loc w/FE
								RTD 3925'
								5 1/2" x 14" x 3928' x 42'
								Cent. 1, 3, 5, 7, 9, 11, 13, 15, 51
								Bank 2, 12, 52
								DV 52 @ 1810'
	1800							start FE 1930 Break circ
	2020	5	0			200		start Preflush 600 gal mud flush 20 bbl KCL flush
		5	32/0			200		start 150 sks EA-2 Cement
	235		36					End Cement
								wash P/L / Drop LD Plug
	2040	6	0			200		start Displacement water
	2050	6	55			250		mad
	2053	5	71			300		Catch Cement
	2058		95			600 / 1200		Land Plug
								Release Pressure / Float Held
	2100							Drop opening Plug
	2103	2.5	7/5					Plug RH + MH 30/15 sks SMD
	2110					1100		Open DV Tool
	2111	5	0			200		start KCL flush 20 bbl
	2115	5	20/0			200		start 155 sks SMD Cement
	2135		86					End Cement
								Drop Closing Plug
	2140	5	0			150		start Displacement
		4	43			450		Circ Cement
	2200		44			450 / 1500		Land Plug / Close DV
								Release Pressure
								DV Closed
								circ 10 sks to pit
								Thank you
								Wick, David E., + Isaac C.

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: Brassfield #1-29

Location: Graham County

License Number: API #15-065-23,792-00-00

Spud Date: 8/22/12

Region: Kansas

Drilling Completed: 8/29/12

Surface Coordinates: 2270' FSL & 1055' FWL

Section 29-Township 9 South-Range 21 West

Bottom Hole Coordinates: Vertical well with minimal deviation, same as above

Ground Elevation (ft): 2322'

K.B. Elevation (ft): 2331'

Logged Interval (ft): 3200'

To: 3925'

Total Depth (ft): RTD-3925' LTD - 3925'

Formation: Topeka thru Arbuckle

Type of Drilling Fluid: Chemical (Mudco - Gary Schmidtberger, Engineer)

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

OPERATOR

Company: Richland Oil Properties, LLC

Address: P.O. Box 166

Palco, KS 67657

GEOLOGIST

Name: Steven P. Murphy, PG

Company: Consulting Petroleum Geologist (KS License #228)

Address: 3365 County Rd 390

Otis, KS 67565

Cell Phone No: 620-639-3030

LOG TOPS (Datum)

The open-hole logging was performed by The Perforators(Hays, KS shop). Logs included Compensated Neutron/Compensated Density, Dual Induction & Microlog.

Formation tops and datums from the open-hole logs include the following:

Top Anhydrite - 1794 (+537)
Base Anhydrite - 1831 (+500)
Topeka - 3305 (-974)
Heebner - 3513 (-1182)
Toronto - 3538 (-1207)
Lansing - 3553 (-1222)
Muncie Crk - 3679 (-1348)
Stark - 3739 (-1408)
BKC -3774 (-1443)
Marmaton -3806 (-1475)
Arbuckle - 3880 (-1549)

DSTs

The following drillstem tests were performed by Ray Schwager w/Trilobite Testing from the Hays, KS shop:

DST #1 3542-3560 (LKC "A" Zone)

30:45:30:60

IF: BOB in 28.5 min, no return blow

FF: BOB in 23 min, no return blow

Recovery: 170' GIP, 60' CO, 20' MGO

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

IHP: 1676 FHP: 1647

IFP: 15-25 ISIP: 919

FFP: 26-41 FSIP: 911

Oil Gravity - 32

BHT - 107 F

DST #2 3616-3640 (LKC "E-F")

30:30

IF: Surface blow died in 12 min, no return blow

FF: None, pulled tool

Recovery: 2' Mud w/show of oil

IHP: 1732 FHP: 1728

IFP: 10-13 ISIP: 876

BHT - 104 F

DST #3 3716-3752 (LKC J-K)

30:30:20:30

IF: Surface blow died in 25 min, no return blow

FF: No blow, no return blow

Recovery: 3' Mud

IHP: 1771 FHP: 1763

IFP: 16-17 ISIP: 672

FFP: 15-17 FSIP: 650

BHT - 106 F

DST #4 3852-3885 (Arbuckle)

30:60:30:60

IF: BOB in 1 min, 1/4" return blow

IF: BOB in 1 min, 1/4" return blow

Recovery: 2,020' Cln Oil, 63' Mdy Gsy Oil

(10% G, 70% O, 20% M)

IHP: 1847 FHP: 1795

IFP: 469-574 ISIP: 1030

FFP: 605-771 FSIP: 1041

Oil Gravity - 29

BHT - 117 F

COMMENTS

The Brassfield #1-29 was drilled by Southwind Drilling Rig #2 (Tool pusher Bill Sanders). MIRU on 8/22/12.

8 5/8" Surface casing was set @ 212' w/170 sacks.


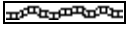
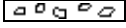

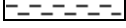




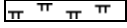
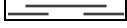
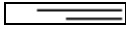
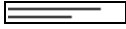
Based on the results of drillstem testing, and open-hole log & sample analysis, 5-1/2" production casing was installed to produce the Arbuckle. The following zones should be commercially productive (recommended perforation intervals):

LKC "A" Zone: 3556-3560
 Arbuckle (1st Brk): 3882-3885

Respectfully submitted,

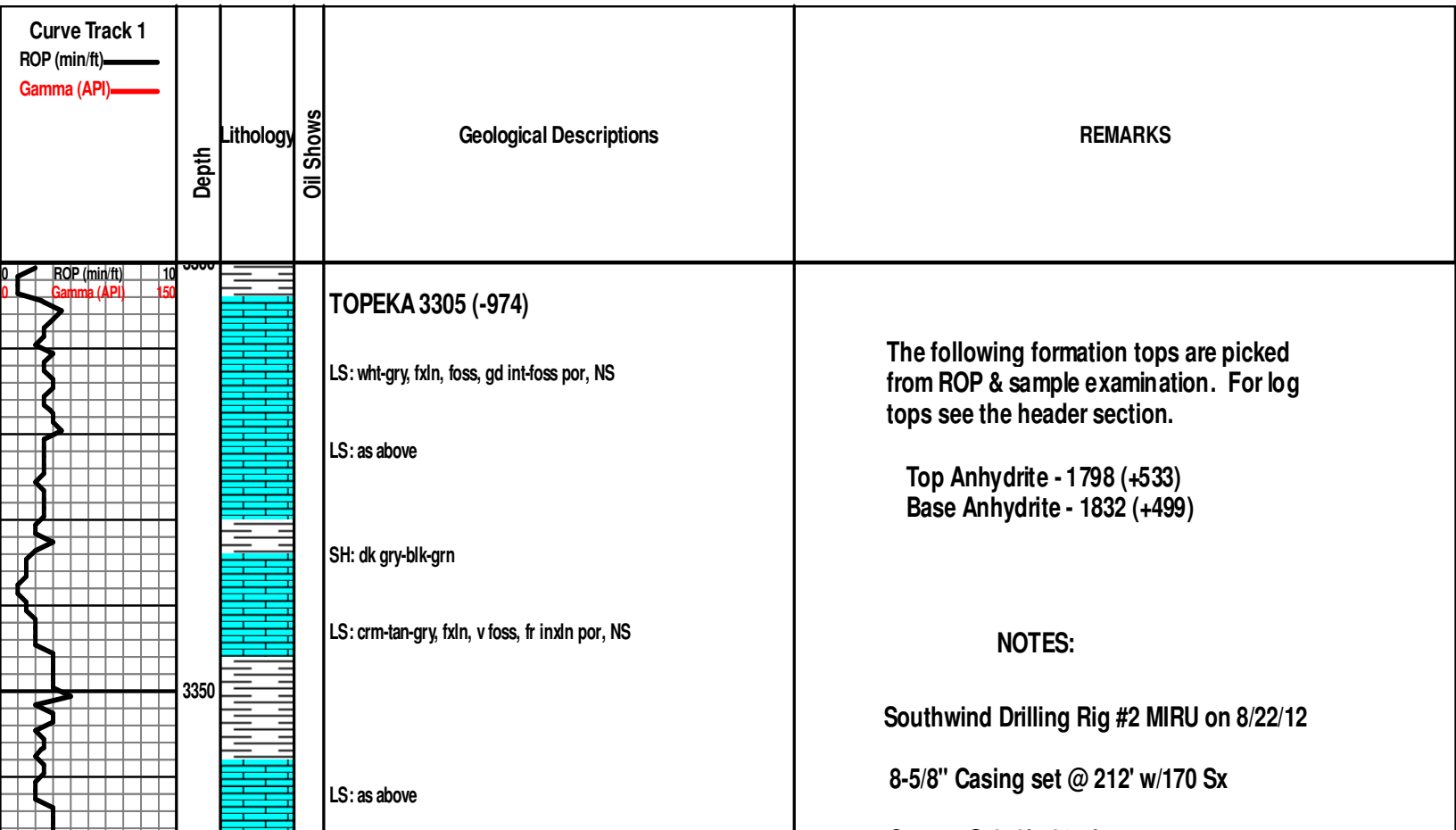
Steven P. Murphy, PG
 Consulting Petroleum Geologist
 (KS Licence #228)

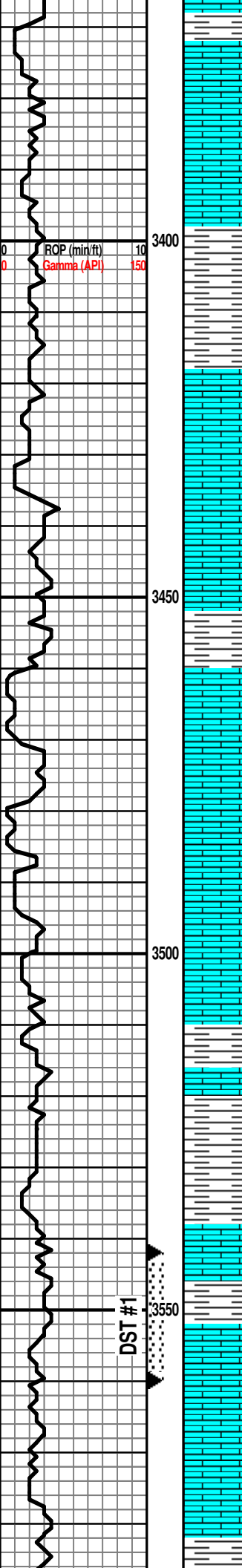
ROCK TYPES

 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
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SH: gry-grn

LS: wht-tan-gry, vfxln, foss in pt, minor cht, dense, sl chalky, NS

LS: as above w/blk shale

3400

ROP (min/ft) 10
Gamma (API) 150

LS: crm'tan'gry, fxl, mottled, chalky, v foss, NS

SH: blk-brn-gry-grn

LS: wht-tan, fxl, dense to fr inxln por, foss, NS

3450

LS: as above

SH: blk-gry

LS: crm-tan, fxl, oolic, foss, sl chalky, NS

LS: crm-tan-gry, fxl, sl foss, dense, NS

LS: as above

LS: wht-tan, fxl, sl chalky, dense, NS

3500

LS: as above

HEEBNER 3510 (-1179)

SH: blk, carb

SH: gry-grn-blk

TORONTO 3532' (-1201)

LS: wht-tan, fxl, foss, oolic in pt, fr inxln por, NS

CFS @ 3540'

SH: gry-red-grn-blk

LANSING 3550 (-1219)

LS: wht-crm, fxl, ool, fr inter-ool & ppt por, fsfo, even lite str, str odor

CFS @ 3560'

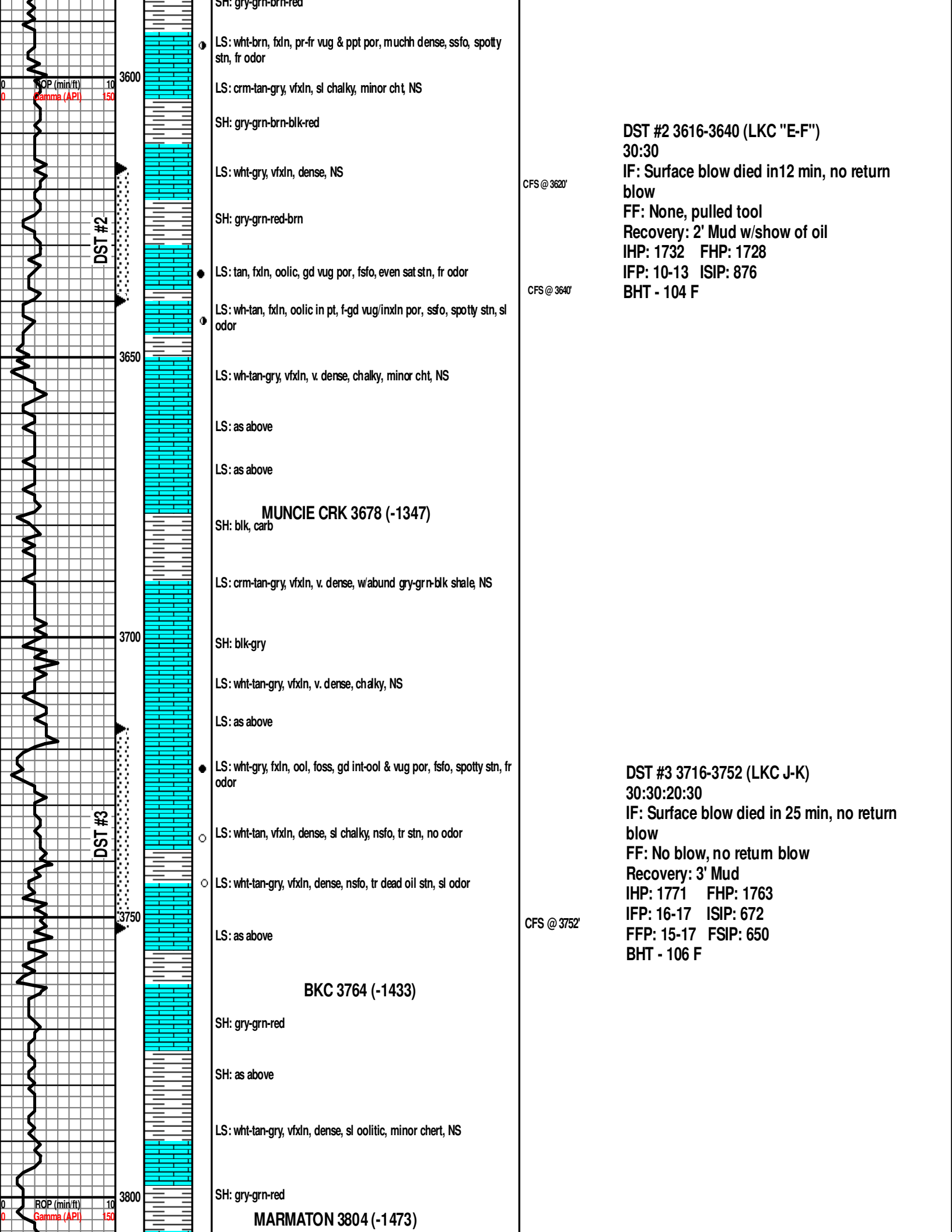
LS: as above

LS: wht-gry, vfxln, dense, minor cht, NS

SH: gry-grn-brn-red

Short trip 15 stands @ 3560'
Survey @ 3560' - 1 degree
Strap @ 3560' - 1.20' long to board

DST #1 3542-3560 (LKC "A" Zone)
30:45:30:60
IF: BOB in 28.5 min, no return blow
FF: BOB in 23 min, no return blow
Recovery: 170' GIP, 60' CO, 20' MGO
(20%G, 60%O, 20%M)
IHP: 1676 FHP: 1647
IFP: 15-25 ISIP: 919
FFP: 26-41 FSIP: 911
Oil Gravity - 32
BHT - 107 F



SH: gry-grn-brn-red

LS: wht-brn, fxl, pr-fr vug & ppt por, muchh dense, ssfo, spotty stn, fr odor

LS: crm-tan-gry, vfxln, sl chalky, minor cht, NS

SH: gry-grn-brn-blk-red

LS: wht-gry, vfxln, dense, NS

SH: gry-grn-red-brn

LS: tan, fxl, oolic, gd vug por, fsfo, even sat stn, fr odor

LS: wh-tan, fxl, oolic in pt, f-gd vug/inxln por, ssfo, spotty stn, sl odor

LS: wh-tan-gry, vfxln, v. dense, chalky, minor cht, NS

LS: as above

LS: as above

MUNCIE CRK 3678 (-1347)

SH: blk, carb

LS: crm-tan-gry, vfxln, v. dense, w/abund gry-grn-blk shale, NS

SH: blk-gry

LS: wht-tan-gry, vfxln, v. dense, chalky, NS

LS: as above

LS: wht-gry, fxl, ool, foss, gd int-ool & vug por, fsfo, spotty stn, fr odor

LS: wht-tan, vfxln, dense, sl chalky, nsfo, tr stn, no odor

LS: wht-tan-gry, vfxln, dense, nsfo, tr dead oil stn, sl odor

LS: as above

BKC 3764 (-1433)

SH: gry-grn-red

SH: as above

LS: wht-tan-gry, vfxln, dense, sl oolitic, minor chert, NS

SH: gry-grn-red

MARMATON 3804 (-1473)

DST #2 3616-3640 (LKC "E-F")
 30:30
 IF: Surface blow died in 12 min, no return blow
 FF: None, pulled tool
 Recovery: 2' Mud w/show of oil
 IHP: 1732 FHP: 1728
 IFP: 10-13 ISIP: 876
 BHT - 104 F

DST #3 3716-3752 (LKC J-K)
 30:30:20:30
 IF: Surface blow died in 25 min, no return blow
 FF: No blow, no return blow
 Recovery: 3' Mud
 IHP: 1771 FHP: 1763
 IFP: 16-17 ISIP: 672
 FFP: 15-17 FSIP: 650
 BHT - 106 F

CFS @ 3620'

CFS @ 3640'

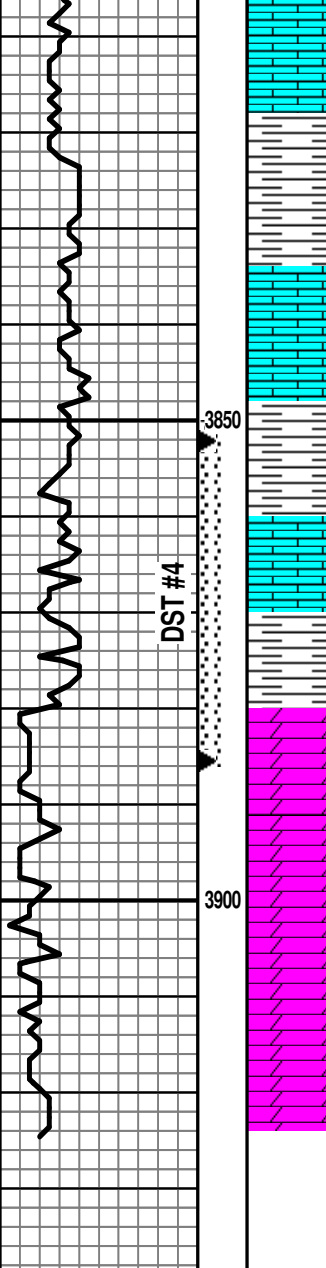
CFS @ 3752'

DST #2

DST #3

ROP (min/ft) 10
 Gamma (API) 150

ROP (min/ft) 10
 Gamma (API) 150



SST: red-gry-grn-wht, vfg, silty & shaley (same colors), tight, NS

SH: red-grn-gry

LS: wht-red-gry, vfxln, dense, mottled, NS

LS: crm-tan-gry, vfxln, dense, NS w/abund grn-red shale

SH: grn-red-gry

LS: crm-tan-gry, vfxln, dense, NS

LS & SH: as above

ARBUCKLE 3880 (-1549)

- DOL: crm-tan, fn-crs xln, rhombic, gd vug & inxln por, gsfo, even sat stn, str odor
- ① DOL: crm-tan-pink, fn-med xln, rhom in pt, some dense, pr-gd inxln por, pr-fr sfo, spotty stn, str odor
- ① DOL: crm-tan-pink, fn-crs xln, rhom in pt, fr-gd vug & inxln por, fsfo, spotty to even stn, str odor
- ① DOL: as above
- ① DOL: as above

RTD - 3925'

LTD - 3925'

CFS @ 3874'

CFS @ 3885'

DST #4 3852-3885 (Arbuckle)
 30:60:30:60
 IF: BOB in 1 min, 1/4" return blow
 IF: BOB in 1 min, 1/4" return blow
 Recovery: 2,020' Cln Oil, 63' Mdy Gsy Oil
 (10% G, 70% O, 20% M)
 IHP: 1847 FHP: 1795
 IFP: 469-574 ISIP: 1030
 FFP: 605-771 FSIP: 1041
 Oil Gravity - 29
 BHT - 117 F



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Richland Oil Investments LLC

29-9s-21w Graham

P O Box 166
Palco Ks 67657

Brassfield #1-29

Job Ticket: 47447

DST#: 1

ATTN: Keith Lambert

Test Start: 2012.08.26 @ 16:40:11

GENERAL INFORMATION:

Formation: **LKC "A"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:23:36
 Time Test Ended: 22:45:05
 Interval: **3542.00 ft (KB) To 3560.00 ft (KB) (TVD)**
 Total Depth: 3560.00 ft (KB) (TVD)
 Hole Diameter: 7.85 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ray Schwager
 Unit No: 42
 Reference Elevations: 2331.00 ft (KB)
 2322.00 ft (CF)
 KB to GR/CF: 9.00 ft

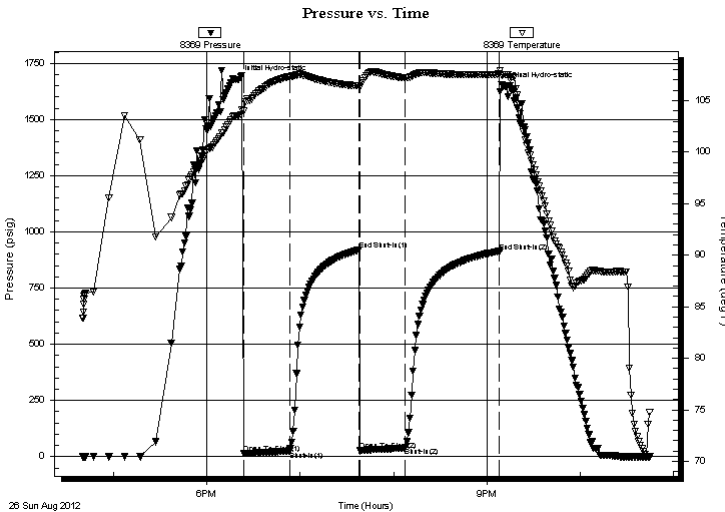
Serial #: 8369

Inside

Press @ Run Depth: 41.06 psig @ 3543.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.08.26 End Date: 2012.08.26 Last Calib.: 2012.08.26
 Start Time: 16:40:11 End Time: 22:45:05 Time On Btm: 2012.08.26 @ 18:20:06
 Time Off Btm: 2012.08.26 @ 21:11:35

TEST COMMENT: 30-IFP-w k to strg in 28min
 45-ISIP-no bl
 30-FFP-w k to strg in 23min
 60-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1676.57	103.53	Initial Hydro-static
4	15.57	104.00	Open To Flow (1)
33	25.37	107.32	Shut-In(1)
78	919.54	106.43	End Shut-In(1)
79	26.33	106.24	Open To Flow (2)
108	41.06	107.21	Shut-In(2)
168	911.67	107.56	End Shut-In(2)
172	1647.52	107.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	170'GIP	0.00
60.00	CO	0.84
20.00	MGO 20%G20%M60%O	0.28

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Richland Oil Investments LLC

29-9s-21w Graham

P O Box 166
Palco Ks 67657

Brassfield #1-29

Job Ticket: 47447

DST#: 1

ATTN: Keith Lambert

Test Start: 2012.08.26 @ 16:40:11

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

32 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.80 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1600.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	170'GIP	0.000
60.00	CO	0.842
20.00	MGO 20%G20%M60%O	0.281

Total Length: 80.00 ft Total Volume: 1.123 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

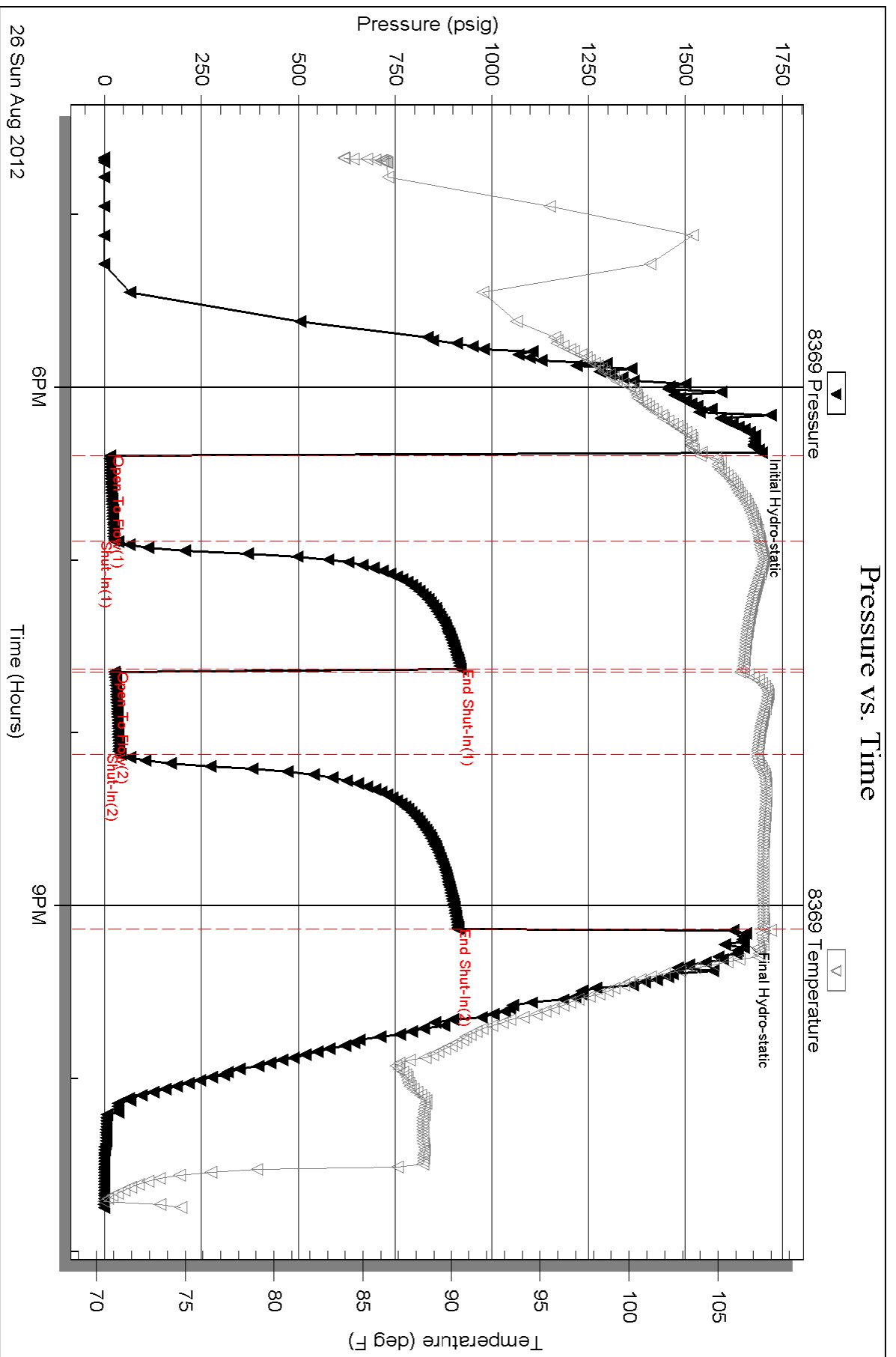
Serial #: 8369

Inside

Richland Oil Investments LLC

Brassfield #1-29

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 47447

Printed: 2012.08.27 @ 00:22:44



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Richland Oil Investments LLC

29-9s-21w Graham

P O Box 166
Palco Ks 67657

Brassfield #1-29

Job Ticket: 47448

DST#: 2

ATTN: Keith Lambert

Test Start: 2012.08.27 @ 08:30:17

GENERAL INFORMATION:

Formation: **LKC E-F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:04:42

Time Test Ended: 12:22:12

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 42

Interval: 3616.00 ft (KB) To 3640.00 ft (KB) (TVD)

Reference Elevations: 2331.00 ft (KB)

Total Depth: 3640.00 ft (KB) (TVD)

2322.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 8369

Inside

Press @ Run Depth: 13.37 psig @ 3617.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.08.27

End Date:

2012.08.27

Last Calib.:

2012.08.27

Start Time: 08:30:17

End Time:

12:22:12

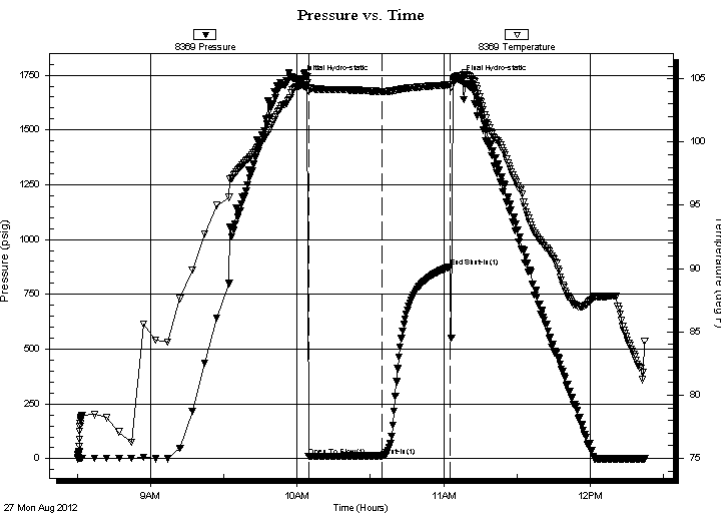
Time On Btm:

2012.08.27 @ 10:01:12

Time Off Btm:

2012.08.27 @ 11:06:12

TEST COMMENT: 30-IFP-surface bl, died in 12 min
30-ISIP-no bl



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1732.17	104.44	Initial Hydro-static
4	10.32	104.00	Open To Flow (1)
34	13.37	104.01	Shut-In(1)
62	876.54	104.53	End Shut-In(1)
65	1728.62	105.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud w/show of oil	0.03

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Richland Oil Investments LLC

29-9s-21w Graham

P O Box 166
Palco Ks 67657

Brassfield #1-29

Job Ticket: 47448

DST#: 2

ATTN: Keith Lambert

Test Start: 2012.08.27 @ 08:30:17

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1600.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Mud w/show of oil	0.028

Total Length: 2.00 ft Total Volume: 0.028 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8369

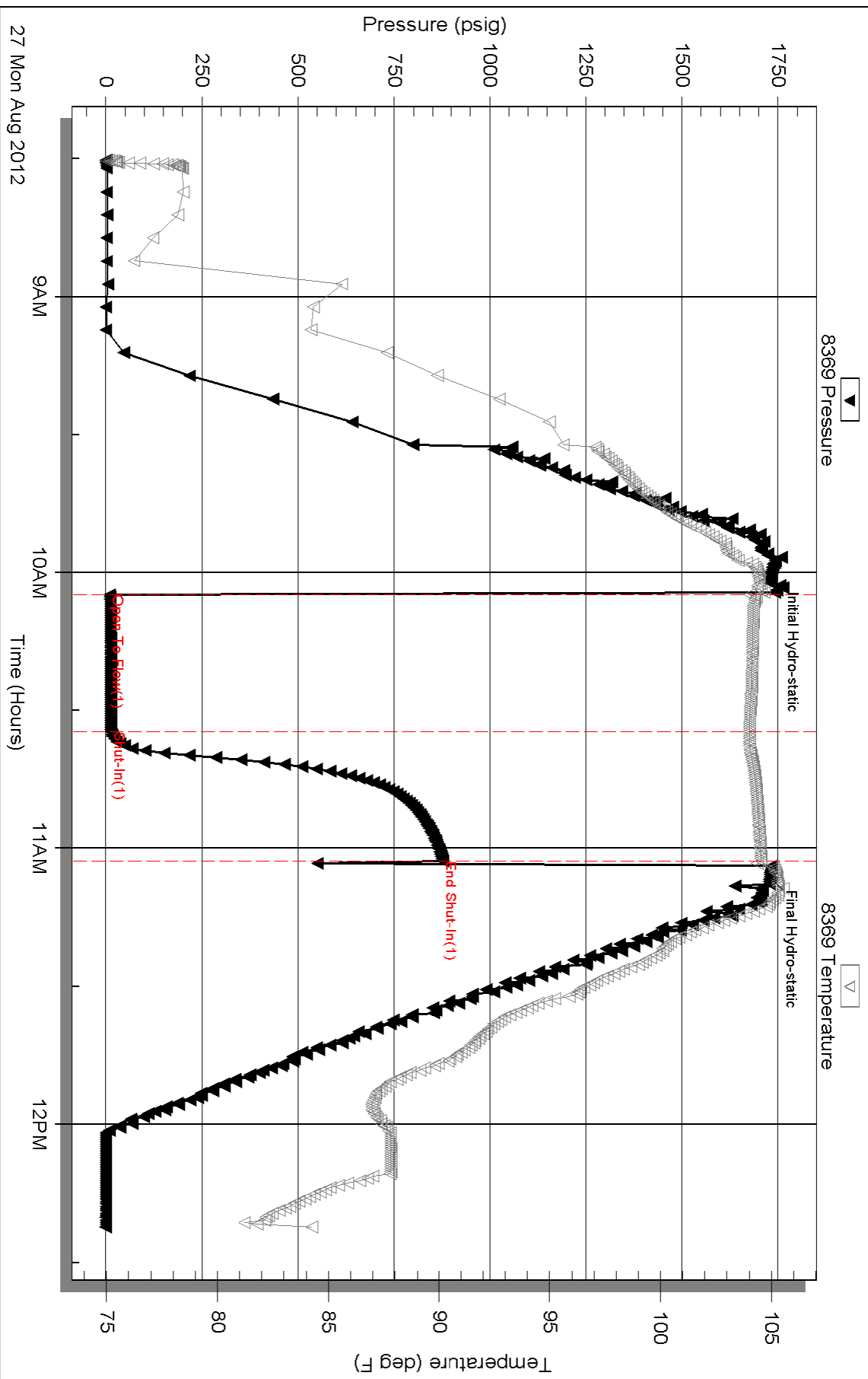
Inside

Richland Oil Investments LLC

Brassfield #1-29

DST Test Number: 2

Pressure vs. Time





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Richland Oil Investments LLC

29-9s-21w Graham

P O Box 166
Palco Ks 67657

Brassfield #1-29

Job Ticket: 47449

DST#: 3

ATTN: Keith Lambert

Test Start: 2012.08.27 @ 23:20:56

GENERAL INFORMATION:

Formation: **LKC J-K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:13:21

Time Test Ended: 04:38:20

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 42

Interval: 3616.00 ft (KB) To 3652.00 ft (KB) (TVD)

Reference Elevations: 2331.00 ft (KB)

Total Depth: 3652.00 ft (KB) (TVD)

2322.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 8369

Inside

Press @ Run Depth: 17.48 psig @ 3621.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.08.27

End Date:

2012.08.28

Last Calib.:

2012.08.28

Start Time:

23:20:56

End Time:

04:38:20

Time On Btm:

2012.08.28 @ 01:09:51

Time Off Btm:

2012.08.28 @ 03:08:21

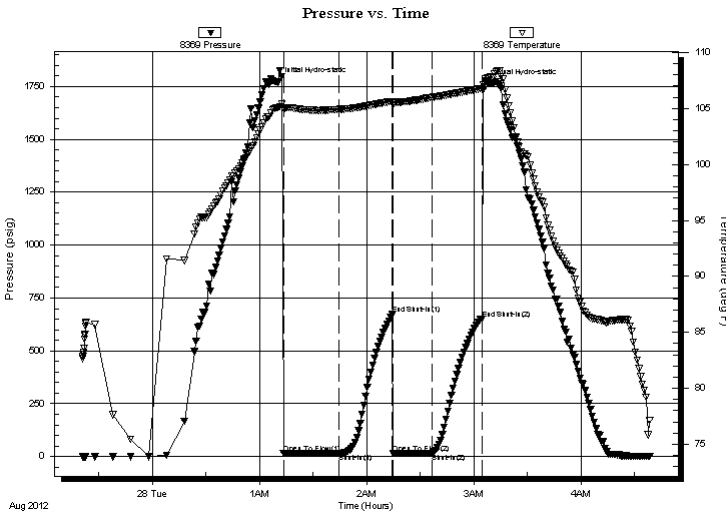
TEST COMMENT: 30-IFP-surface bl , died in 25 min

30-ISIP-no bl

20-FFP-no bl

30-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1771.70	105.08	Initial Hydro-static
4	16.21	105.00	Open To Flow (1)
35	17.27	104.92	Shut-In(1)
65	672.30	105.64	End Shut-In(1)
65	15.89	105.34	Open To Flow (2)
87	17.48	106.00	Shut-In(2)
115	650.25	106.77	End Shut-In(2)
119	1763.40	107.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
3.00	Mud	0.04

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Richland Oil Investments LLC

29-9s-21w Graham

P O Box 166
Palco Ks 67657

Brassfield #1-29

Job Ticket: 47449

DST#: 3

ATTN: Keith Lambert

Test Start: 2012.08.27 @ 23:20:56

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1600.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
3.00	Mud	0.042

Total Length: 3.00 ft Total Volume: 0.042 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8369

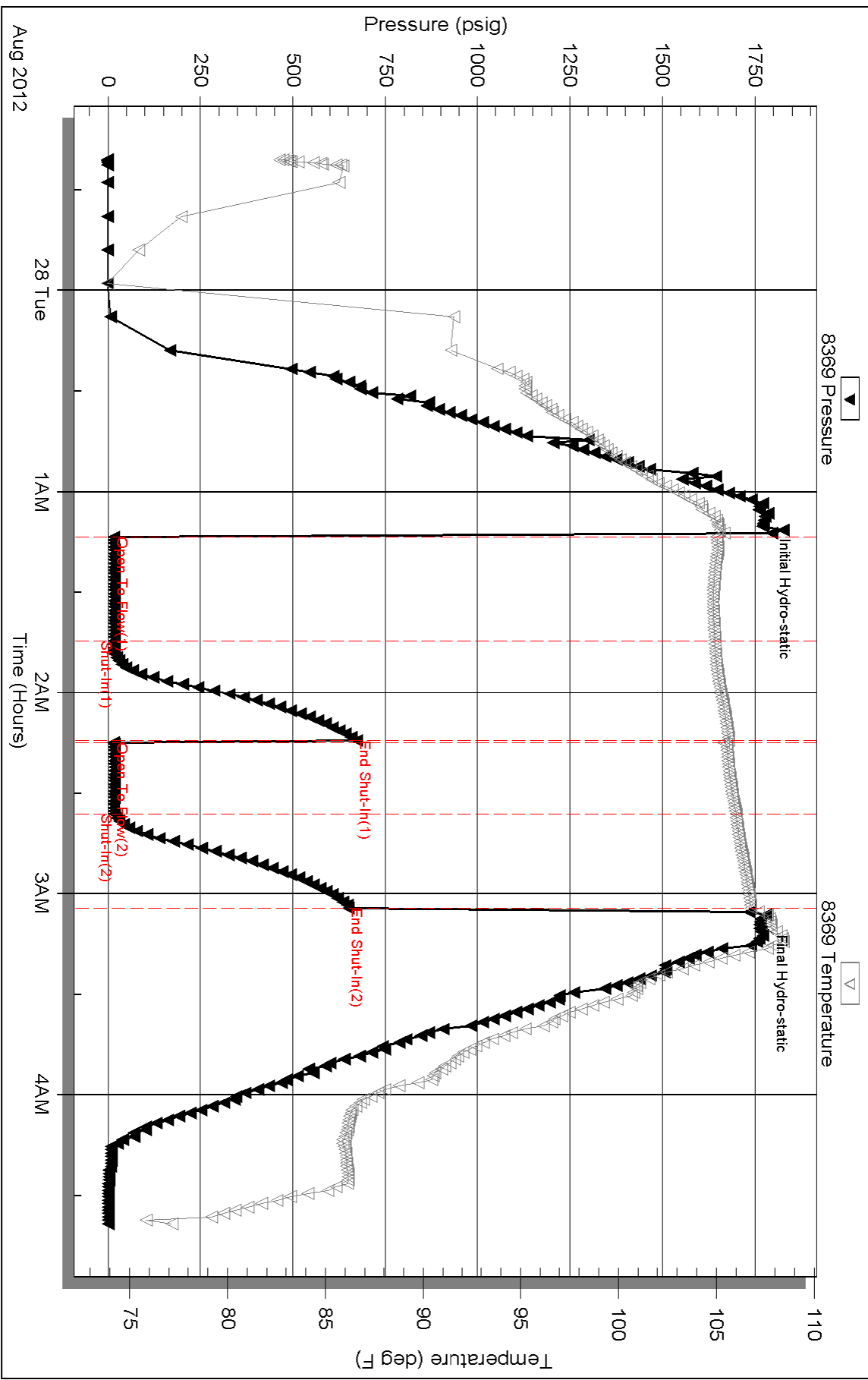
Inside

Richland Oil Investments LLC

Brassfield #1-29

DST Test Number: 3

Pressure vs. Time





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Richland Oil Investments LLC

29-9s-21w Graham

P O Box 166
Palco Ks 67657

Brassfield #1-29

Job Ticket: 47450

DST#: 4

ATTN: Keith Lambert

Test Start: 2012.08.28 @ 17:36:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:10:25

Time Test Ended: 01:18:24

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 42

Interval: 3852.00 ft (KB) To 3885.00 ft (KB) (TVD)

Reference Elevations: 2331.00 ft (KB)

Total Depth: 3885.00 ft (KB) (TVD)

2322.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 8369 Inside

Press @ Run Depth: 771.54 psig @ 3858.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.08.28

End Date:

2012.08.29

Last Calib.:

2012.08.29

Start Time: 17:36:00

End Time:

01:18:24

Time On Btm:

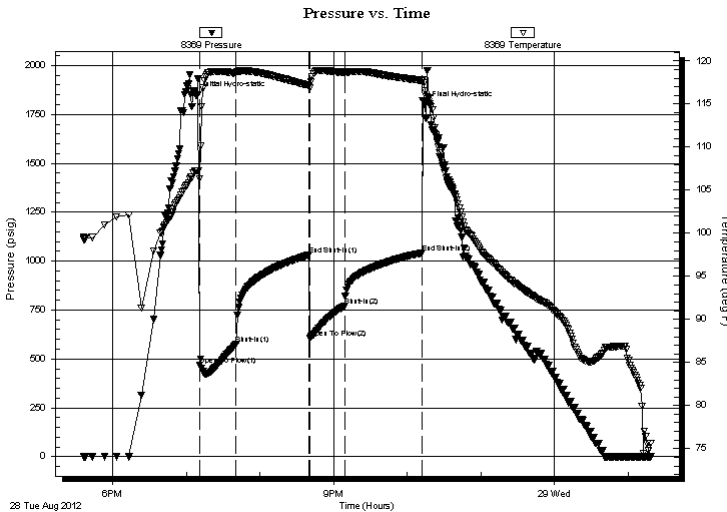
2012.08.28 @ 19:07:55

Time Off Btm:

2012.08.28 @ 22:14:24

TEST COMMENT: 30-IFP-strg bl in 1min
60-ISIP-1/4"bl bk
30-FFP-strg bl in 1min
60-FSIP-1/4"bl bk

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1847.24	107.27	Initial Hydro-static
3	469.58	106.37	Open To Flow (1)
33	574.88	118.68	Shut-In(1)
92	1030.50	117.18	End Shut-In(1)
93	605.43	116.87	Open To Flow (2)
121	771.54	118.69	Shut-In(2)
184	1041.44	117.73	End Shut-In(2)
187	1795.27	116.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2020.00	CO	28.34
63.00	MGO 10%G20%M70%O	0.88

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Richland Oil Investments LLC

29-9s-21w Graham

P O Box 166
Palco Ks 67657

Brassfield #1-29

Job Ticket: 47450

DST#: 4

ATTN: Keith Lambert

Test Start: 2012.08.28 @ 17:36:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

29 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 63.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1600.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2020.00	CO	28.335
63.00	MGO 10%G20%M70%O	0.884

Total Length: 2083.00 ft Total Volume: 29.219 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

