



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1189375
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: _____

1189375

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
--	---

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: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	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)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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CONSOLIDATED
Oil Well Services, LLC

REMIT TO
Consolidated Oil Well Services, LLC
Dept. 970
P.O. Box 4346
Houston, TX 77210-4346

MAIN OFFICE
P.O. Box 884
Chanute, KS 66720
620/431-9210 • 1-800/467-8676
Fax 620/431-0012

INVOICE

Invoice # 264687

Invoice Date: 12/11/2013 Terms: 10/10/30,n/30

Page 1

REILLY OIL COMPANY, INC
P.O. BOX 277
WAKEENEY KS 67672
(785)743-6774

MARY 1-7
44495
7-11S-24W
12-10-2013
KS

Part Number	Description	Qty	Unit Price	Total
1104S	CLASS "A" CEMENT (SALE)	165.00	18.5500	3060.75
1102	CALCIUM CHLORIDE (50#)	465.00	.9400	437.10
1118B	PREMIUM GEL / BENTONITE	310.00	.2700	83.70

Sublet Performed	Description	Total
9996-130	CEMENT MATERIAL DISCOUNT	-358.16
9995-130	CEMENT EQUIPMENT DISCOUNT	-190.32

Description	Hours	Unit Price	Total
463 CEMENT PUMP (SURFACE)	1.00	1150.00	1150.00
463 EQUIPMENT MILEAGE (ONE WAY)	40.00	5.25	210.00
693 TON MILEAGE DELIVERY	1.00	543.20	543.20

Amount Due 5758.74 if paid after 01/10/2014

Parts:	3581.55	Freight:	.00	Tax:	246.59	AR	5182.86
Labor:	.00	Misc:	.00	Total:	5182.86		
Sublt:	-548.48	Supplies:	.00	Change:	.00		

Signed _____

Date _____

BARTLESVILLE, OK 918/338-0808 EL DORADO, KS 316/322-7022 EUREKA, KS 620/583-7664 PONCA CITY, OK 580/762-2303 OAKLEY, KS 785/672-8822 OTTAWA, KS 785/242-4044 THAYER, KS 620/839-5269 GILLETTE, WY 307/686-4914 CUSHING, OK 918/225-2650



CONSOLIDATED
Oil Well Services, LLC

264687

TICKET NUMBER 44495
LOCATION Dalley Ks
FOREMAN Jerry Yates
Walt Dinkal

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
12-10-13	7165	Mary 1-7	7	115	24W	Tread
CUSTOMER Reilly Oil Co, Inc			Yoda Rd			
MAILING ADDRESS			North to			
CITY			Rd B			
STATE			3/4 E. 55			
ZIP CODE			TRUCK #			
			DRIVER			
			TRUCK #			
			DRIVER			

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 219' CASING SIZE & WEIGHT 85/8 - 23#
CASING DEPTH 219' DRILL PIPE _____ TUBING _____ OTHER _____
SLURRY WEIGHT 15.2 SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 15-20'
DISPLACEMENT 12 3/4 DISPLACEMENT PSI _____ MIX PSI _____ RATE 5 BPM

REMARKS: Safety Meeting, rig up on W-W#6, circ casing on bottom
Mix 185 sls conc, 3% acc-2% lat, Displace 12 3/4 BBL H₂O, shut in

Comat Dd Circ

Approx 2 BBL to PT

Thank You
(Walt, Jerry + crew)

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
54015	1	PUMP CHARGE	1,150 ⁰⁰	1,150 ⁰⁰
5406	40	MILEAGE	5 ²⁵	210 ⁰⁰
5407A	7.76	Ton Mileage Delivery	1 ⁷⁵	543 ²⁰
11045	165 sls	Class A Comat	18 ⁵⁵	3,060 ⁷⁵
1102	465 #	Calcium Chloride	.94	4,377 ¹⁰
111813	310 #	Gel	.27	83 ⁷⁰
				5,484 ⁷⁵
		Less 10% Disc		- 548 ⁴⁸
				4,936 ²⁷
		7.65	SALES TAX	246.59
			ESTIMATED TOTAL	5182.86

SCANNED

Revin 3737

AUTHORIZATION: Maui Biggs TITLE Pusher DATE 12-10-13

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.



P. O. Box 466
 Ness City, KS 67560
 Off: 785-798-2300



Invoice

DATE	INVOICE #
12/19/2013	25256

BILL TO
Reilly Oil Company, Inc. P. O. Box 277 Wakeeney, KS 67672-0277



- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#1-7	Mary	Trego	WW Drilling	Oil	Development	5-1/2" TwoStage ...	Josh
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				40	Miles	6.00	240.00
579D	Pump Charge - Two-Stage				1	Job	2,000.00	2,000.00
221	Liquid KCL (Clayfix)				4	Gallon(s)	25.00	100.00T
281	Mud Flush				500	Gallon(s)	1.25	625.00T
290	D-Air				4	Gallon(s)	42.00	168.00T
402-5	5 1/2" Centralizer				10	Each	70.00	700.00T
403-5	5 1/2" Cement Basket				2	Each	300.00	600.00T
407-5	5 1/2" Insert Float Shoe With Auto Fill				1	Each	375.00	375.00T
408-5	5 1/2" D.V. Tool & Plug Set				1	Each	3,550.00	3,550.00T
411-5	5 1/2" Recipo Scratcher				40	Each	50.00	2,000.00T
417-5	5 1/2" D.V. Latch Down Plug & Baffle				1	Each	200.00	200.00T
580	Additional Hours (If Circulate More Than 1 Hour)				2	Hours	200.00	400.00
325	Standard Cement				175	Sacks	14.50	2,537.50T
330	Swift Multi-Density Standard (MIDCON II)				250	Sacks	18.50	4,625.00T
276	Flocele				125	Lb(s)	2.50	312.50T
283	Salt				900	Lb(s)	0.20	180.00T
284	Calseal				8	Sack(s)	35.00	280.00T
285	CFR-1				100	Lb(s)	4.50	450.00T
581D	Service Charge Cement				425	Sacks	2.00	850.00
583D	Drayage				866	Ton Miles	1.00	866.00
	Subtotal							21,059.00
	Sales Tax Trego County						7.65%	1,277.78

Thank You For Your Business & Best Wishes For A Wonderful Holiday Season!!

Total \$22,336.78



Services, Inc.

CHARGE TO: Reilly Oil

ADDRESS

CITY, STATE, ZIP CODE

TICKET 25256

PAGE 1 OF 2

1. SERVICE LOCATION	WELL/PROJECT NO.	LEASE	COUNTY/PARISH	STATE	CITY	DATE	OWNER
Hays ks	1-7	Mary	Trego	KS		12-19-13	
2. Messing ks	TICKET TYPE	CONTRACTOR	RIG NAME/NO.	SHIPPED VIA	DELIVERED TO	ORDER NO.	
	<input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	W W	6	CT	Location		
3.	WELL TYPE	WELL CATEGORY	JOB PURPOSE	WELL PERMIT NO.	WELL LOCATION		
	Oil	Development	5 1/2 Tons Street Longhorn		Sec 7 Twp 16 S R 24 W		
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575					MILEAGE #112	40	mi			6.00	240.00
579					Pump Charge Two Stage	1	ea			2000.00	2000.00
221					Loguid KCL	4	gal			25.00	100.00
281					Mud flush	500	gal			1.25	625.00
290					O-Air	4	gal			42.00	168.00
402					Centrifuges	10	ea		5 1/2"	70.00	700.00
403					Cement Basket	2	ea			300.00	600.00
407					Insert Plug Shoe w/ Auto Fill	1	ea			375.00	375.00
408					OV Tool + Plug Set	1	ea			3550.00	3550.00
411					Reciproc Scrappers	40	ea			50.00	2000.00
417					OV Latch Down Plug + Beffle	1	ea			200.00	200.00
580					Additional hrs	2	hr			200.00	400.00

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

DATE SIGNED: 12-19-13
TIME SIGNED: 0400
AM/PM: AM PM

REMIT PAYMENT TO:

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

SURVEY

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?

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? YES NO

CUSTOMER DID NOT WISH TO RESPOND

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?	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?
SUBTOTAL				21059.00
TAX				1277.78
TOTAL				22336.78

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES

The customer hereby acknowledges receipt of the materials and services listed on this ticket.

SWIFT OPERATOR

John Bell

APPROVAL

Thank You!



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

TICKET CONTINUATION

TICKET No. 25256

CUSTOMER Reilly Oil

WELL Mary 1-7

DATE 12-19-13

PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	WELL				UNIT PRICE	AMOUNT	
		LOC	ACCT	DF			QTY.	UM	QTY.	UM			
325		2				Standard Cement F.A.2	175	SKS			14.50	2537.50	
330		2				Swift Multi-Density	250	SKS			18.50	4625.00	
216		2				Flu cele	125	lbs			2.50	312.50	
283		2				Salt	900	lbs			.20	180.00	
284		2				Cel Seal	80	SKS			35.00	2800.00	
285		2				CFR-1	100	lbs			4.50	450.00	
581		2				SERVICE CHARGE					2.00	850.00	
583		2				MILEAGE CHARGE					1.00	866.00	
TOTAL							43275	LOADED MILES	40	CUBIC FEET	125	TON MILES	866

CONTINUATION TOTAL 10101.50

JOB LOG

SWIFT Services, Inc.

DATE 12-19-13 PAGE NO.

CUSTOMER Heilly oil WELL NO. 1-7 LEASE Mary JOB TYPE 5 1/2 Third Stage TICKET NO. 25256

CHART NO.	TIME	RATE (BPM)	VOLUME (BBLL/GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0600							on location
								TD 4051 SJ 42
								TP 4054 Basket 4012
								DV top 49 2007" 5 1/2 x 15.5"
								Centralizes 2,3,4,5,6,7,8,10,12, 48
								Basket 13, 49 scratches 2,3,4,5,6,7,8,9,10,11
	0445							Start Pipe
	0630							Drop Ball Break Circulation Reciprocate
	0740	5	12		✓		300	Start mud flush
		5	20		✓		300	Start KCL flush
		5	42		✓		200	Start EA-2 cement 175 sks
	0817							Drop Plug wash out Pump + lines
	0820	6						Start Displacement
		6	47.7		✓			Start mud
	0840	6	95.4		✓		800 / 1500	Land Plug
								Release Dry
	0845							Drop Open Plug wash up truck
	0855						1100	open DV circulate 2 Hrs.
	110		7		✓			Plug RH 30
	1112	5	20		✓		200	Start KCL flush
		5	110		✓		200	Start Cement 200 sks SMO @ 11.2#/gal
		5	6		✓		200	20 sks SMO @ 13.5#/gal
	1143							Drop Plug
	1145	4			✓		200	Start Displacement
			37		✓		350	circulate cement
			47.7		✓		400 / 1500	Land Plug Close DV
								Wash up Truck Rack up
	1230							Job Complete
								Thank You
								Josh, Brian, Isaac
								circulate 15 sks to pit

API #: 15-195-22901-0000

GEOLOGICAL REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY Reilly Oil Company, Inc.
 LEASE Mary # 1-7
 FIELD Tidball East
 LOCATION 1208' ENL + 929' FEL
 SEC 7 TWSP 11s RGE 24w
 COUNTY Trego STATE Kansas

ELEVATION
 KB 2376'
 DF 2374'
 GL 2371'
 Depths Measured From
 Log KB Drilling KB

CONTRACTOR WW Drilling Rig #6
 SPUD 12-10-13 COMP 12-18-13
 SAMPLES SAVED FROM 3450' TO R.T.D.

CASING
 Surface 8 7/8" @ 218'
 Production 5 1/2"

ELECTRIC LOGS
Nabors

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE	E. LOG	DATUM	A	B	C	D
			<u>E. log</u>				
<u>Anhydrite</u>	<u>1985</u>	<u>1985</u>	<u>+ 391</u>	<u>+ 387</u>	<u>+ 393</u>	<u>+ 388</u>	
<u>Base Anhydrite</u>	<u>2026</u>	<u>2026</u>	<u>+ 350</u>	<u>+ 348</u>	<u>+ 348</u>	<u>+ 347</u>	
<u>Topeka</u>	<u>3447</u>	<u>3447</u>	<u>- 1071</u>	<u>- 1079</u>	<u>- 1075</u>	<u>- 1074</u>	
<u>Heebner</u>	<u>3665</u>	<u>3665</u>	<u>- 1289</u>	<u>- 1295</u>	<u>- 1295</u>	<u>- 1291</u>	
<u>Toronto</u>	<u>3689</u>	<u>3689</u>	<u>- 1313</u>	<u>- 1329</u>	<u>- 1317</u>	<u>- 1316</u>	
<u>Lansing</u>	<u>3704</u>	<u>3704</u>	<u>- 1328</u>	<u>- 1341</u>	<u>- 1332</u>	<u>- 1331</u>	
<u>Base Kansas City</u>	<u>3938</u>	<u>3938</u>	<u>- 1562</u>			<u>- 1567</u>	
<u>Marmaton</u>	<u>3983</u>	<u>3983</u>	<u>- 1607</u>			<u>- 1612</u>	
<u>Total Depth</u>	<u>4050</u>	<u>4051</u>	<u>- 1675</u>	<u>- 1553</u>	<u>- 1562</u>	<u>- 1762</u>	

REFERENCE WELLS

- A Rupe Oil Co., Davis #1, NE-SW-NE Sec. 7-11s-24W
- B Rupe Oil Co., Davis #3, NW-SE-NE Sec. 7-11s-24W
- C Rupe Oil Co., Davis #4, SE-NE-NE Sec. 7-11s-24W
- D

REMARKS

This well ran 3 to 13 feet higher on the Lansing top than the reference wells. After reviewing D.S.T. and open hole data it was decided production casing should be cemented to further test the well. The following zones should be tested: 3905'-3907', 3885'-3890', 3863'-3867', 3839'-3841', 3748'-3750', 3735'-3737 and 3705'-3709'.

Richard R. Ybelle
12-18-13

7502

LEGEND

- Anhydrite

- Salt

- Sandstone

- Shale

- Carb sh

- Limestone

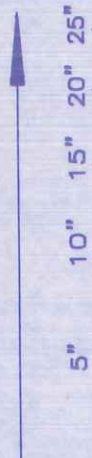
- Ool. Lime

- Chert

- Dolomite


DRILLING TIME IN MINUTES
PER FOOT

Rate of Penetration Decreases



DEPTH

1980

2000

2020

LITHOLOGY

SAMPLE DESCRIPTIONS

OIL SHOWS

REMARKS

LOG 7710

REMARKS

This well ran 3 to 13 feet higher on the casing top than the reference wells. After reviewing D.S.T. and open hole data it was decided production casing should be cemented to further test the well. The following zones should be tested: 3905'-3907', 3885'-3890', 3863'-3867', 3839'-3841', 3748'-3750', 3735'-3737 and 3705'-3709'.

Richard B. Bell
12-18-13

7502

LEGEND

- Anhydrite

- Salt

- Sandstone

- Shale

- Carb sh

- Limestone

- Ool. Lime

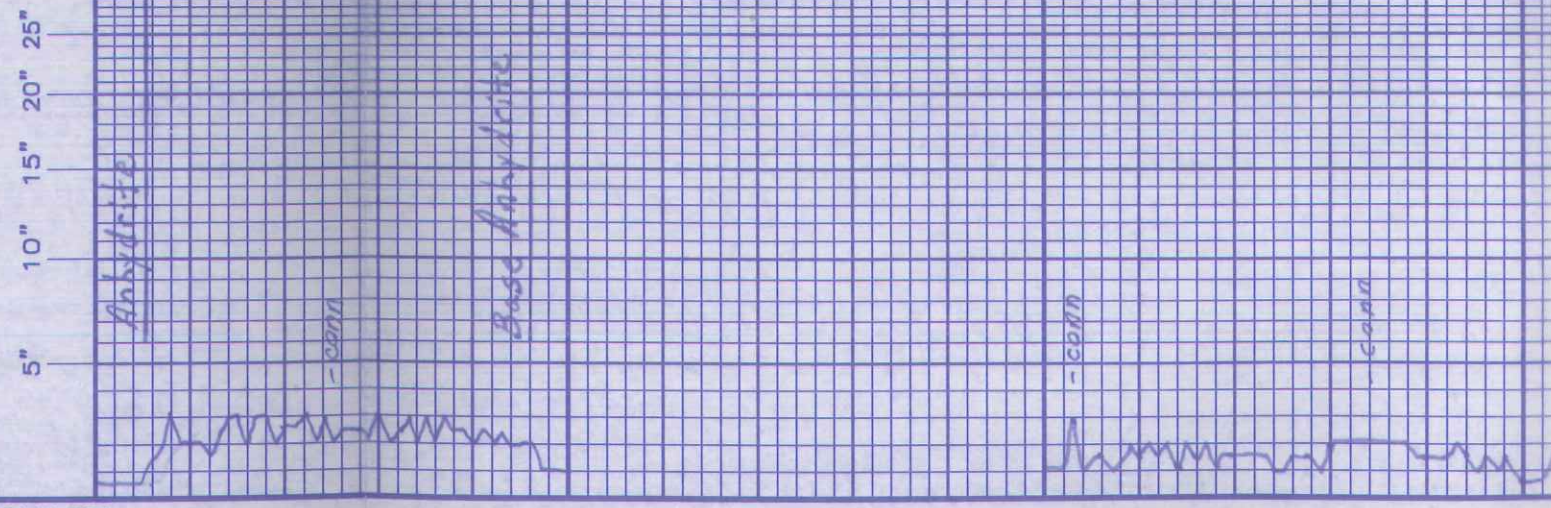
- Chert

- Dolomite


DEPTH	LITHOLOGY	SAMPLE DESCRIPTIONS	REMARKS
1980	Anhydrite		
2000	Anhydrite		
2020	Anhydrite		
3350	Anhydrite		
3400	Anhydrite		Samples are lagged good samples

DRILLING TIME IN MINUTES
PER FOOT

Rate of Penetration Decreases



LOG 7710



-conn

-conn Topoka

conn

conn

20

40

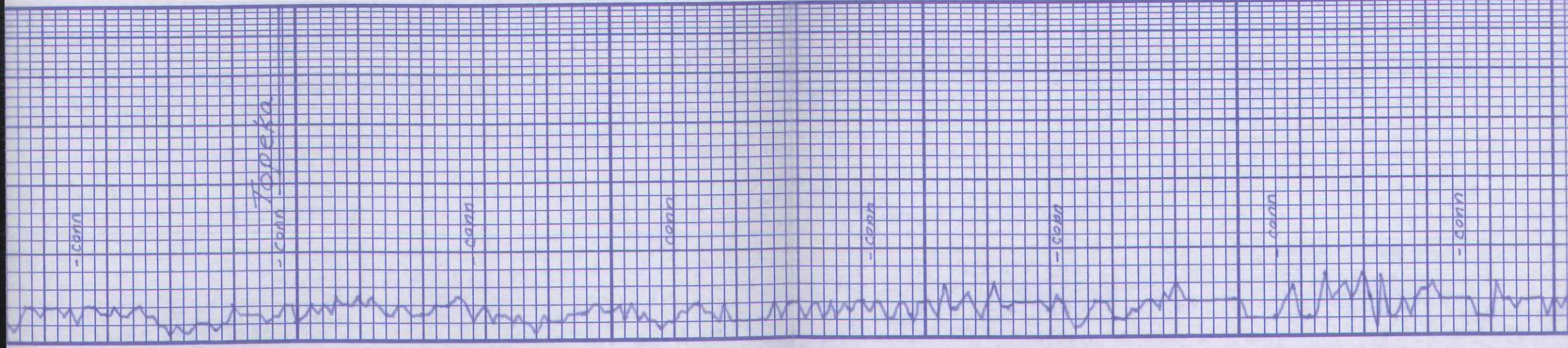
60

80

3500

20

LS: gry fsf das Tr Δ gry fsf	sb: gry + brn Tr. psite
LS: tn-gry fsln das Sh: gry + brn	
LS: wh-tn sl: cky-fsln das Tr. fsf pp N.S.O.	
LS: tn-gry fsf tr. pr. pp N.S.O. sh: gry	
LS: wh-tn-gry Tr. cky-fsln das N.S.O. sh: brn, gry, blk carb.	
LS: wh-tn Tr. cky-sl: sec-fsln pp N.S.O.	
LS: a.a. incr. cky	
LS: tn-gry fsf das Tr Δ drk gry - blk sh: gry, brn	
LS: wh-tn cky-fsln sl: oil pp N.S.O.	
LS: wh-tn cky-fsln sl: oil pp N.S.O. Tr Δ wh-tn fsf	
LS: tn-gry fsf das	
LS: tn-gry mly fsf pp N.S.O.	



-conn

-conn
Topeka

-conn

-conn

-conn

-conn

-conn

-conn

20

40

60

80

3500

20

40

60

80

3600

20

40

LS: gry-fsif das
Tr Δ gry-fsif

sh: gry tbrn Tr. pr. white

LS: fo-gry-feln das
Sh: gry tbrn

LS: wh-ta sl: cky-feln das
Tr. fsif pp Δ N.S.O.

LS: tn-gry-fsif tr. pr. pp
N.S.O. sh: gry

LS: wh-ta-gry Tr. cky-feln das
N.S.O. sh: brn, gry, blk carb.

LS: wh-ta Tr. cky-sli. suc-feln
pp Δ N.S.O.

LS: a.a. incr. cky

LS: tn-gry-fsif das
Tr. h. dck gry - blk

Sh: gry, brn

LS: wh-ta cky-feln sli. öl
pp Δ N.S.O.

LS: wh-ta cky-feln sli. öl
pp Δ N.S.O. Tr Δ wh-ta fsif

LS: tn-gry-fsif das

LS: tn-gry mly fsif pp Δ N.S.O.

LS: wh-ta fsif tr. feln
Tr. pp Δ N.S.O.
Δ tn-ta gry

Sh: blk carb.

LS: tn-lt. brn fsif das.

SS: wh-gry fn. gn. consol.
ingran cky N.S.O.
Sh: gry tbrn

LS: wh-ta cky-feln fsif
pp Δ N.S.O.

LS: wh-ta sli: cky-feln öl
pp Δ N.S.O. Δ tn-or

LS: wh-ta feln-fsif das
Sh: gry tbrn

LS: wh-ta cky-feln No vis
N.S.O. Tr Δ tn

LS: wh-ta cky-feln öl pp
in part Δ friable N.S.O.
Δ tn-lt. gry

LS: wh-ta sli: cky-feln -sli. suc
pp Δ N.S.O.
Δ ty whdn

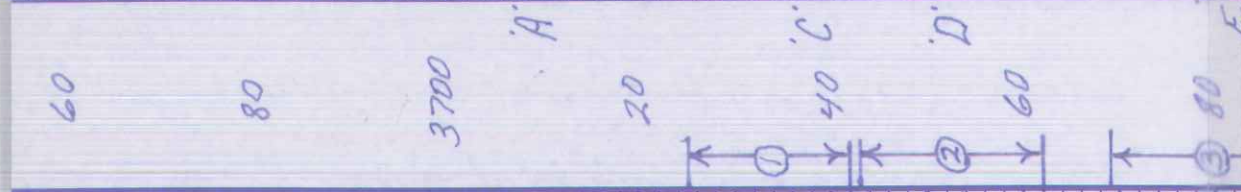
LS: wh-ta-lt. gry cky-fsif
das N.S.O. Δ tn

Sh: gry tbrn

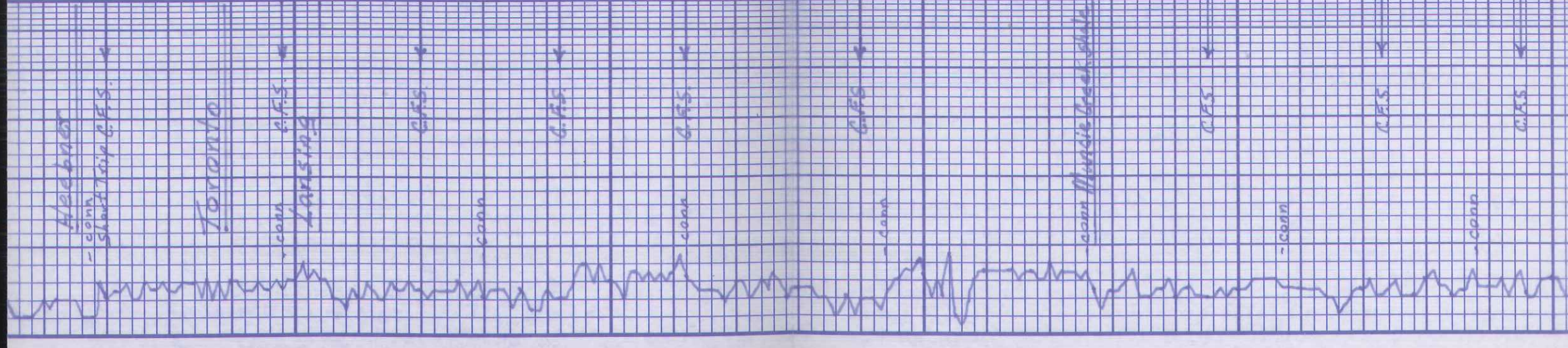
LS: wh-ta cky-feln -sli.

Board 3762.15
 Strap 3761.55
 Diff .60
 Incline @ 3742' 34°
 Diamond Testing
 DST #1 3725-3742'
 15-LO-30-LO
 IF: B.O.B. in 3/4 min
 ISI: 1 1/2" blow
 FF: B.O.B. in 3 min.
 FSI: No blow
 Recovery: 1329' Total
 20' C.O. gravity 20' APZ
 444' SW w/o i/Scum
 865' SW
 HYD: 1781-1777#
 FP: 69-331/346-448#
 BHP: 1112-1098#
 BH Temp: 123°F.
 Chlorides: 64,000 ppm
 DST #2 3743-3762'
 15-LO-30-LO
 IF: B.O.B. in 5 min
 ISI: 1" blow died
 FF: B.O.B. in 10 min.
 FSI: 1/4" blow died
 Recovery: 60' I.P.
 618' Total fluid
 20' C.O. gravity 27' APZ
 170-1072# 972#

15H Tr. pp @ N.S.O.
 A wh. tr.
 Sh: blk Carb.
 15: tn fs/f dns
 Sl: stone: gry
 aa + brn
 15: wh. tracky. fx in dns
 N.S.O. A+Y tn
 Sl: brn + gry
 15: wh. tn v. cky. fx in oil
 pp @ 8.1 ft. O.S.T.
 Tr pp F.O. on crushing.
 No odor
 15: wh. tn. fx in dns
 15: tn. fs/f dns
 sh: gry + brn
 15: wh. tn fs/f pp @ - in part @
 frostn pp F.O. ft. odor
 Δ wh. tn 15H
 15: wh. v. cky 15: wh. tn. fx in
 oil pp @ - V.G.Y @ ft. rainbow s. R.
 drk spt. lostn pp floating F.O.
 strong odor
 A wh. tr.
 15: wh. tn. ht. gry sl: cky. fx in
 dns
 Sh: blk Carb
 15: wh. tn. fx in. sl. fs/f dns
 N.S.O.
 15: wh. tn. tn. tn. dns



Heebner
 - conn
 Short Trip C.F.S.
 Toronto
 - conn
 C.F.S.
 Karsina
 - conn
 C.F.S.
 - conn
 C.F.S.
 - conn
 C.F.S.



60	Sh: blk Carb. Ls: tn fslf dns	tsn Tr. ppw n.s.o. A wh. tn
80	Sltstone gry aa + brn	
3700	Ls: wh-tncky-fxln dns N.S.O. A+V, tn	
20	Sh: brn + gry Ls: wh-tn v. cky-fxln oöl ppp, st. st. O. sst Tr. pp. f.o. on crushing N. odor Ls: wh-tn fxln dns	
40	Ls: tn fslf dns sh: gry + brn Ls: wh-tn fslf ppp - in part fr. o. stn pp. f.o. fr. odor A wh-tn fslf	
60	Ls: wh-tn v. cky Ls: wh-tn fxln oöl ppp - v. gry dk spt. o. stn pp floating f.o. strong odor A wh-tn	
80	Sh: blk Carb Ls: wh-tn fxln sli. fslf dns, s.o.	
3800	Ls: wh-tn fxln dns Dol: wh-tn sac-fxln ppp, Tr. v. gry fr. O. sat. pp. f.o. strong odor A wh-tn gry	
20	Ls: wh-tn v. cky-fxln ppp stn from above	
40	Ls: wh-tn cky-fxln dns N.S.O. Ls: wh-tn lt. gry deer. cky- fxln dns N.S.O.	
60	Sh: blk Carb. Ls: tn-fxln gry fxln sli-fslf dns N.S.O.	
80	Ls: wh-tn v. cky-fxln sli-fslf fr. O. sat. lot of floating fo. strong odor Ls: wh-tn cky-fxln dns A wh Tr. sh: blk Carb Sh: gry + brn	
3900	Ls: wh-tn sli. cky-fxln Tr. sli. oöl w/ pass. inclus. ppp - Tr. v. gry fr. O. sat. around floating fo. fr. odor Sh: gry + brn Ls: wh-tn cky-fxln ppp - v. gry rainbow s.o. dk spt. O. stn Tr. dk O. sat. pp floating fo. fr. odor Sh: dk gry, brn, may	

Board 3762.15
Strap 3761.55
Diff .60
Incline @ 3742' 340
Diamond Testing

DST #1 3725'-3742'
15-60-30-60
IF: B.O.B. in 1 3/4 min
FSI: 1 1/2" blow
FF: B.O.B. in 3 min.
FSI: No blow
Recovery: 1329' Total
20' C.O. gravity 20° API
444' SW w/o 15 cum
865' SW
HYD: 1781-1777 #
FP: 68-331/346-648 #
BHP: 112-1098 #
BH Temp: 123° F.
Chlorides: 64,000 ppm

DST #2 3743'-3762'
15-60-30-60
IF: B.O.B. in 5 min
FSI: 1" blow died
FF: B.O.B. in 10 min.
FSI: 1/4" blow died
Recovery: 606' Total
218' C.O. gravity 20° API
93' 05 MW 170, 102 M, 972 W
307' SW Tr. O. SPS.
HYD: 1795-1795 #
FP: 15-122-127-246 #
BHP: 1129-1122 #
BH Temp: 118° F.
Chlorides: 68,000 ppm

DST #3 3769'-3790'
30-60-30-60
IF: B.O.B. in 18 min.
FSI: No blow
FF: wk blow, incr. to 9 1/2"
FSI: No blow
Recovery: 400' Total
10' C.O. gravity 25° API
145' 05 MW 270, 62 M, 922 W
245' SW w/o 5 cum
HYD: 1809-1808 #
FP: 14-119-128-196 #
BHP: 1108-1107 #
BH Temp: 122° F.
Chlorides: 65,000 ppm

DST #4 3824'-3845'
15-45-15-45
IF: B.O.B. in 1 min.
FSI: No blow
FF: B.O.B. in 2 min.
FSI: wk blow incr. to 1 1/2"
Recovery: 1287' Total
20' C.O. gravity 32° API
92' OGCW 107.9, 42.0
472 M, 892 W
372' OC MW 470, 42 M, 922 W
803' MW 27 M, 987.6 W
HYD: 1826-1828 #
FP: 126-483-443-645 #
BHP: 746-746 #
BH Temp: 124° F.
Chlorides: 73,000 ppm

DST #5 3854'-3873'
15-60-30-60
IF: B.O.B. in 4 min
FSI: 2" blow

FF: B.O.B. in 4 min.
 FSI: 9" blow
 Recovery: 750' G.I.P.
 493' Total
 341' C.O. gravity 43.5° A.P.I.
 31' G+OC MW 57.9, 30% W
 121' SW 27% M, 37% W
 Hyd: 1819-1814#
 FP: 26-91/91-161#
 BHP: 944-931#
 BH Temp: 121°F
 Chlorides: 63,000 ppm

DST#6 3873'-3895'
 15-45-15-45
 IF: B.O.B. in 5 min
 ISI: 1/8" blow died
 FF: B.O.B. in 6 min.
 FSI: 10" blow
 Recovery: 300' G.I.P.
 253' WCPO 50% O, 43% M,
 7% W
 126' MW 107% M, 90% W
 Hyd: 1827-1827#
 FP: 39-108/120-161#
 BHP: 946-914#
 BH Temp: 118°F
 Chlorides: 55,000 ppm

DST#7 3895'-3916'
 10-30-30-60
 IF: B.O.B. in 10 sec.
 ISI: No blow
 FF: B.O.B. in 30 sec.
 FSI: 13/4" blow
 Recovery: 186' G.I.P.
 193' Total Fluid
 20' C.O. gravity 30.2° A.P.I.
 22' OCW 40% O, 60% W
 372' MCOW 10% O, 57% M,
 85% W
 372' G+OCW 37.9, 8% O,
 90% W
 1113' SW
 MW: 1856-1855#
 130-532/595-898#

LS: wh-tn cky-feln Tr. 001 1003
 inclus. pp. Tr. Vay of Tr. ht.
 0.5th pp. F.O. No odor

sh: gry + brn

LS: tn-brn fsif dns

LS: wh-tn cky-feln Tr ppφ
 No cut N.S.O.

sh: brn, gry

sh: brn + gry Tr. ss: wh-gry
 v. fn. gn. Consol: ingramp
 No cut

LS: wh-tn feln-sli-fsif dns
 N.S.O.

sh: brn + gry Tr. shly ss: brn

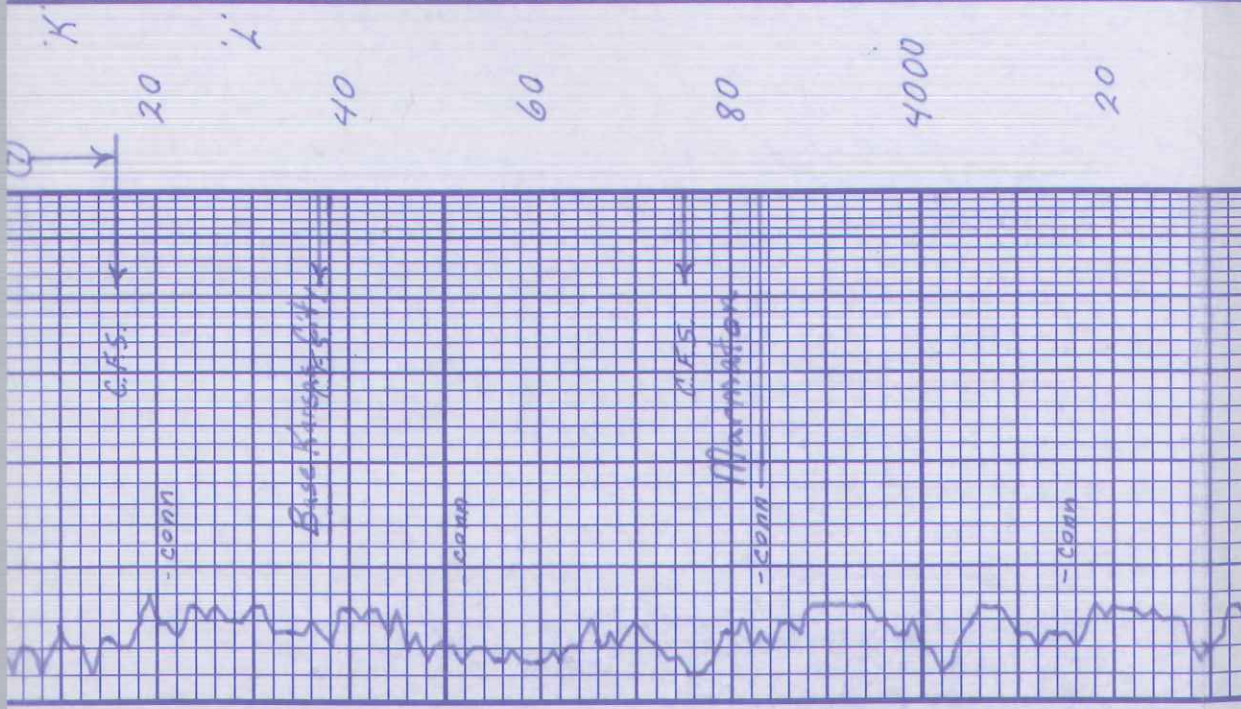
LS: wh-tn-ht-gry sli: cky-feln
 dns N.S.O.

sh: gry + brn

LS: wh-tn-feln dns N.S.O.

sh: brn + gry

LS: wh-tn-brn feln dns N.S.O.



20

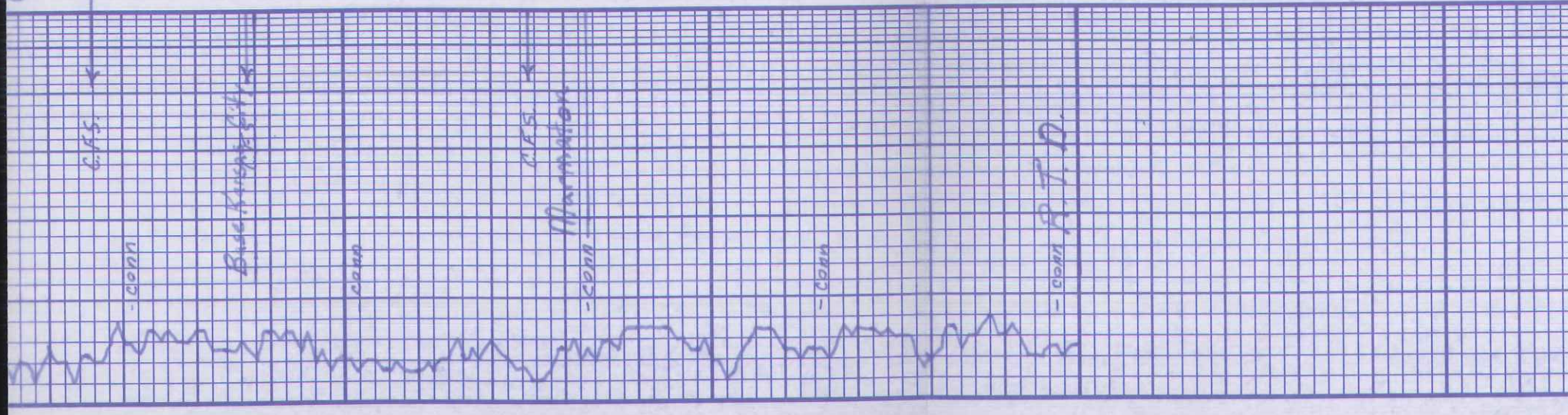
40

60

80

4000

20



15: wh to cky-feln Tr. 001 1403 incl. ss. pp. Tr. 1st Tr. Ht. 0.5th pp. F.O. No odor	sh: gry & brn
15: wh to cky-feln Tr. pp. 1404 No cut N.S.O.	ls: to-brn fsif dns
sh: brn, gry	
sh: brn & gry Tr. ss: wh: gry v. f. gn. Consol: in gran. φ No cut	
15: wh to feln-sli-fsif dns N.S.O.	
sh: brn & gry Tr. shly ss: brn	
15: wh to ht. gry sli. cky-feln dns N.S.O.	
sh: gry & brn	
15: wh to feln dns N.S.O.	
sh: brn & gry	
15: wh to-brn feln dns N.S.O.	
sh: brn, gry, grn	

FF: B.O.B. in 4 min.
FSI: 9" blow
Recovery: 750' G.I.P.
493' Total
341' C.O. gravity 43.5° A.P.I.
31' G+OC MW 57.9, 30% W
27% M, 37% W
Hyd: 1819-1814#
FP: 26-91/91-161#
BHP: 944-931#
BHTemp: 121°F.
Chlorides: 63,000 ppm

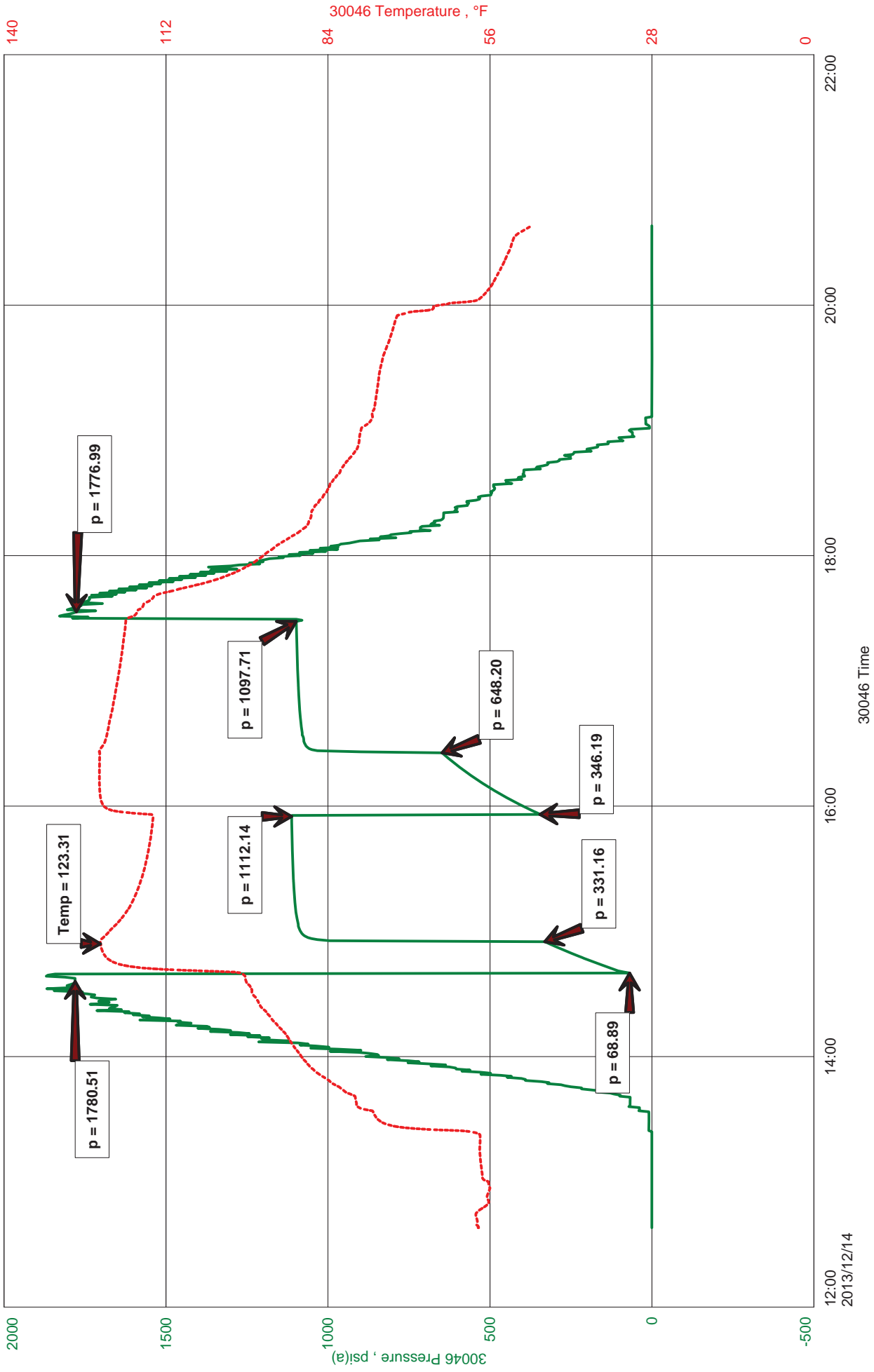
DST#6 3873'-3895'
15-45-15-45
IF: B.O.B. in 5 min
ISI: 48" blow died
FF: B.O.B. in 6 min.
FSI: 10" blow
Recovery: 300' G.I.P.
253' WC M.O. 50% O, 43% W
7% W
126' MW 10% M, 90% W
Hyd: 1827-1827#
FP: 39-108/120-161#
BHP: 946-914#
BHTemp: 118°F.
Chlorides: 55,000 ppm

DST#7 3895'-3916'
10-30-30-60
IF: B.O.B. in 10 sec.
ISI: No blow
FF: B.O.B. in 30 sec.
FSI: 13/4" blow
Recovery: 186' G.I.P.
1939' Total Fluid
20' C.O. gravity 30.2° A.P.I.
22' OC W 40% O, 60% W
372' MCO W 10% O 5% M
372' G+OC W 85% W, 8% O,
90% W
1113' SW
Hyd: 1856-1855#
FP: 330-537/575-898#
BHP: 1003-1008#
BHTemp: 125°F.
Chlorides: 66,000 ppm

REILLY OIL COMPANY, INC.
DST #1 LKC 'C' 3,725' - 3,742'
Start Test Date: 2013/12/14
Final Test Date: 2013/12/14

MARY #1-7
Formation: DST #1 LKC 'C' 3,725' - 3,742'

MARY #1-7





**DIAMOND TESTING
ROGER D. FRIEDLY - TESTER
CELL 620-793-2043**

Company Name REILLY OIL COMPANY, INC.
Contact DUSTY RHOADES
Well Name MARY #1-7
Unique Well ID DST #1 LKC 'C' 3,725' - 3,742'
Surface Location SEC 7-11S-24W TREGO CNTY, KS

Start Test Date 2013/12/14
Final Test Date 2013/12/14
Test Type CONVENTIONAL
Formation DST #1 LKC 'C' 3,725' - 3,742'
Test Purpose Initial Test
Well Fluid Type 01 Oil

Job Number NO. 1
Test Unit
Representative ROGER D. FRIEDLY
Well Operator REILLY OIL COMPANY, INC.
Report Date 2013/12/14
Prepared By ROGER D. FRIEDLY
Qualified By RICHARD BELL
Start Test Time 12:38:00
Final Test Time 20:38:00

Remarks

RECOVERED: 20' CLEAN OIL 20 GRAVITY @ 60 deg.
444' SW 100% WTR WITH SCUM OF OIL
865' SW 100% WTR
1,329' TOTAL FLUID

TOOL SAMPLE: 2% OIL, 98% WTR

CHLORIDES: 64,000 Ppm
PH 7.0
RW .17 @ 48 deg



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: MARY1-7DST1

TIME ON: 12:38
TIME OFF: 20:38

Company REILLY OIL CO., INC. Lease & Well No. MARY #1-7
Contractor WW RIG #6 Charge to REILLY OIL CO., INC.
Elevation 2,376 KB Formation LKC 'C' Effective Pay _____ Ft. Ticket No. _____
Date 12-14-13 Sec. 7 Twp. _____ 11 S Range _____ 24 W County TREGO State KANSAS
Test Approved By RICHARD BELL Diamond Representative ROGER D. FRIEDLY

Formation Test No. 1 Interval Tested from 3,725 ft. to 3,742 ft. Total Depth 3,742 ft.
Packer Depth 3,720 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 3,725 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3,713 ft. Recorder Number 30046 Cap. 5,000 P.S.I.
Bottom Recorder Depth (Outside) 3,739 ft. Recorder Number 13498 Cap. 3,925 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chem Viscosity 63 Drill Collar Length 121 ft. I.D. 2 1/4 in.
Weight 9.0 Water Loss 6.8 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 2,700 P.P.M. Drill Pipe Length 3,577 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number N/A Test Tool Length 27 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 17 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: **GOOD 4" BLOW INCREASING TO BOTTOM OF BUCKET IN 1 3/4 MIN (F 1/2" BB)**
2nd Open: **GOOD 4" BLOW INCREASING TO BOTTOM OF BUCKET IN 3 MIN (NOBB)**

Recovered 20 ft. of CLEAN OIL 20 GRAVITY @ 60 DEG.
Recovered 444 ft. of SW 100% WTR WITH SCUM OF OIL
Recovered 865 ft. of SW 100% WTR

Recovered <u>1,329</u> ft. of <u>TOTAL FLUID</u>	<u>CHLORIDES 64,000 Ppm</u>	
Recovered _____ ft. of _____	<u>PH 7.0</u>	Price Job
Recovered _____ ft. of _____	<u>RW .17 @ 48 deg</u>	Other Charges
Remarks: <u>DIESEL IN BUCKET</u>		Insurance
<u>TOOL SAMPLE: 2% OIL, 98% WTR</u>		Total

Time Set Packer(s) 2:34 P.M. A.M. P.M. Time Started Off Bottom 5:14 P.M. A.M. P.M. Maximum Temperature 123

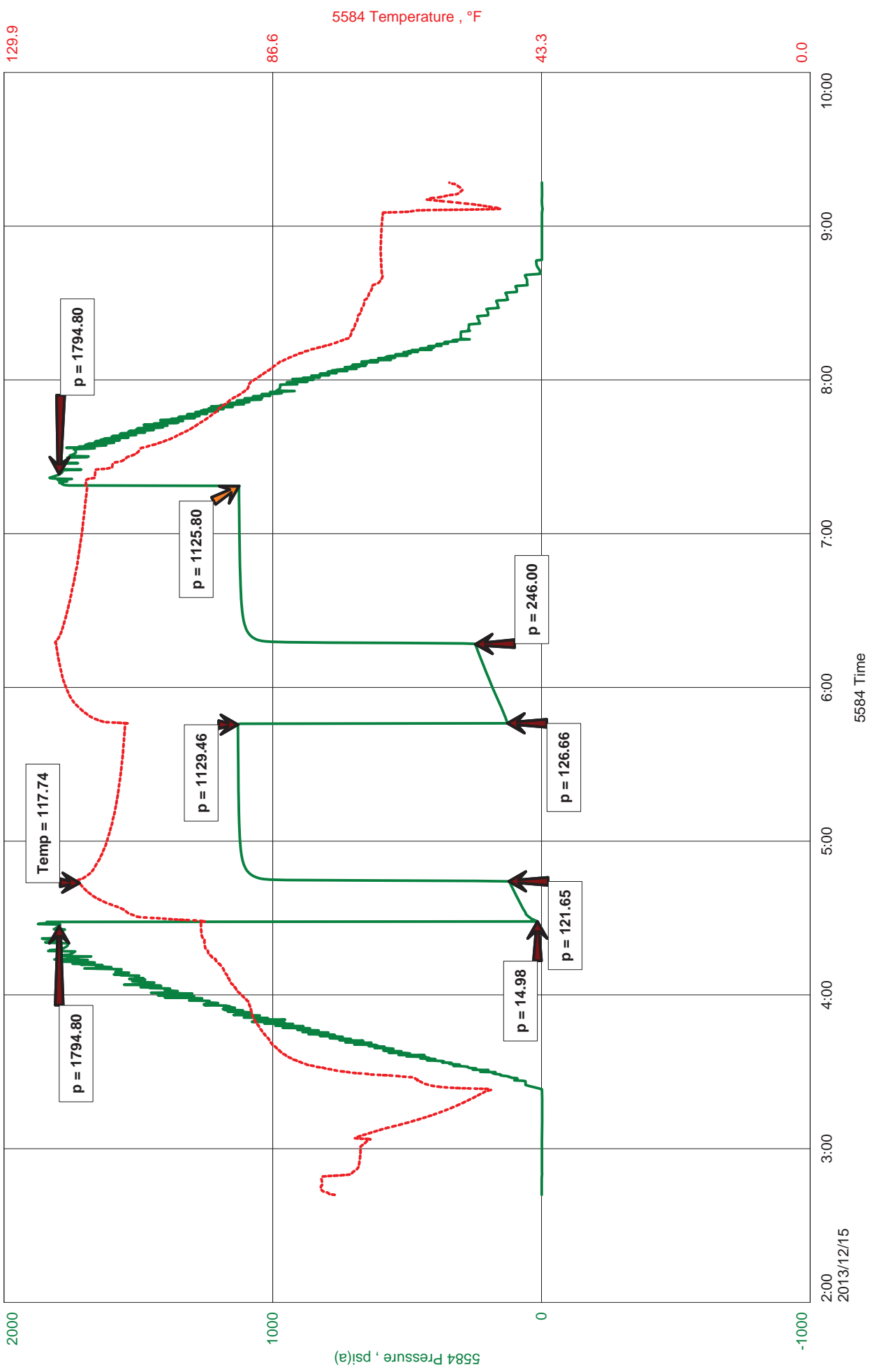
Initial Hydrostatic Pressure..... (A) 1,781 P.S.I.
Initial Flow Period..... Minutes 15 (B) 69 P.S.I. to (C) 331 P.S.I.
Initial Closed In Period..... Minutes 60 (D) 1,112 P.S.I.
Final Flow Period..... Minutes 30 (E) 346 P.S.I. to (F) 648 P.S.I.
Final Closed In Period..... Minutes 60 (G) 1,098 P.S.I.
Final Hydrostatic Pressure..... (H) 1,777 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.

REILLY OIL COMPANY, INC.
DST #2 LKC 'D' 3,743' - 3,762'
Start Test Date: 2013/12/15
Final Test Date: 2013/12/15

MARY #1-7
Formation: DST #2 LKC 'D' 3,743' - 3,762'

MARY #1-7



2000

1000

0

-1000

129.9

86.6

43.3

0.0

2:00
2013/12/15

3:00

4:00

5:00

6:00

7:00

8:00

9:00

10:00



**DIAMOND TESTING
ROGER D. FRIEDLY - TESTER
CELL 620-793-2043**

Company Name REILLY OIL COMPANY, INC.
Contact DUSTY RHOADES
Well Name MARY #1-7
Unique Well ID DST #2 LKC 'D' 3,743' - 3,762'
Surface Location SEC 7-11S-24W TREGO CNTY, KS

Start Test Date 2013/12/15
Final Test Date 2013/12/15
Test Type CONVENTIONAL
Formation DST #2 LKC 'D' 3,743' - 3,762'
Test Purpose Initial Test
Well Fluid Type 01 Oil

Job Number
Test Unit NO. 1
Representative ROGER D. FRIEDLY
Well Operator REILLY OIL COMPANY, INC.
Report Date
Prepared By ROGER D. FRIEDLY
Qualified By RICHARD BELL
Start Test Time 02:42:00
Final Test Time 09:17:00

Remarks

RECOVERED: 60' GAS IN PIPE
218' CLEAN OIL 27 GRAVITY @ 60 deg.
93' OSMW 1% OIL, 89% WTR, 10% MUD
307' SW 100% WTR - FEW OIL SPECKS
618' TOTAL FLUID

TOOL SAMPLE: 4% OIL, 96% WTR

CHLORIDES 68,000 Ppm
PH 8.0
RW .10 @ 87 deg



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: MARY1-7DST2

TIME ON: 02:42
TIME OFF: 09:17

Company REILLY OIL CO., INC. Lease & Well No. MARY #1-7
Contractor WW RIG #6 Charge to REILLY OIL CO., INC.
Elevation 2,376 KB Formation LKC 'D' Effective Pay _____ Ft. Ticket No. _____
Date 12-15-13 Sec. 7 Twp. _____ 11 S Range _____ 24 W County TREGO State KANSAS
Test Approved By RICHARD BELL Diamond Representative ROGER D. FRIEDLY

Formation Test No. 2 Interval Tested from 3,743 ft. to 3,762 ft. Total Depth 3,762 ft.
Packer Depth 3,738 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 3,743 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3,731 ft. Recorder Number _____ Cap. 5,000 P.S.I.
Bottom Recorder Depth (Outside) 3,759 ft. Recorder Number 13498 Cap. 3,925 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chem Viscosity 63 Drill Collar Length 121 ft. I.D. 2 1/4 in.
Weight 9.0 Water Loss 6.8 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 2,700 P.P.M. Drill Pipe Length 3,597 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number N/A Test Tool Length 25 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 19 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: FAIR 1" BLOW INCREASING TO BOTTOM OF BUCKET IN 5 MIN (W 1 1/2" BB DIED)
2nd Open: FAIR 4" BLOW INCREASING TO BOTTOM OF BUCKET IN 10 MIN (2 1/4" BB DIED)

Recovered 60 ft. of GAS IN PIPE
Recovered 218 ft. of CLEAN OIL 27 GRAVITY @ 60 deg.
Recovered 93 ft. of OSMW 1% OIL, 89% WTR, 10% MUD
Recovered 307 ft. of SW 100% WTR - FEW OIL SPECKS

Recovered <u>618</u> ft. of <u>TOTAL FLUID</u>	<u>CHLORIDES 68,000 Ppm</u>	Price Job
Recovered _____ ft. of _____	<u>PH 8.0</u>	Other Charges
Remarks: _____	<u>RW .10 @ 87 deg.</u>	Insurance
<u>DIESEL IN BUCKET</u>		
<u>TOOL SAMPLE: 4% OIL, 96% WTR</u>		Total

Time Set Packer(s) 4:29 A.M. A.M. P.M. Time Started Off Bottom 7:14 A.M. A.M. P.M. Maximum Temperature 118

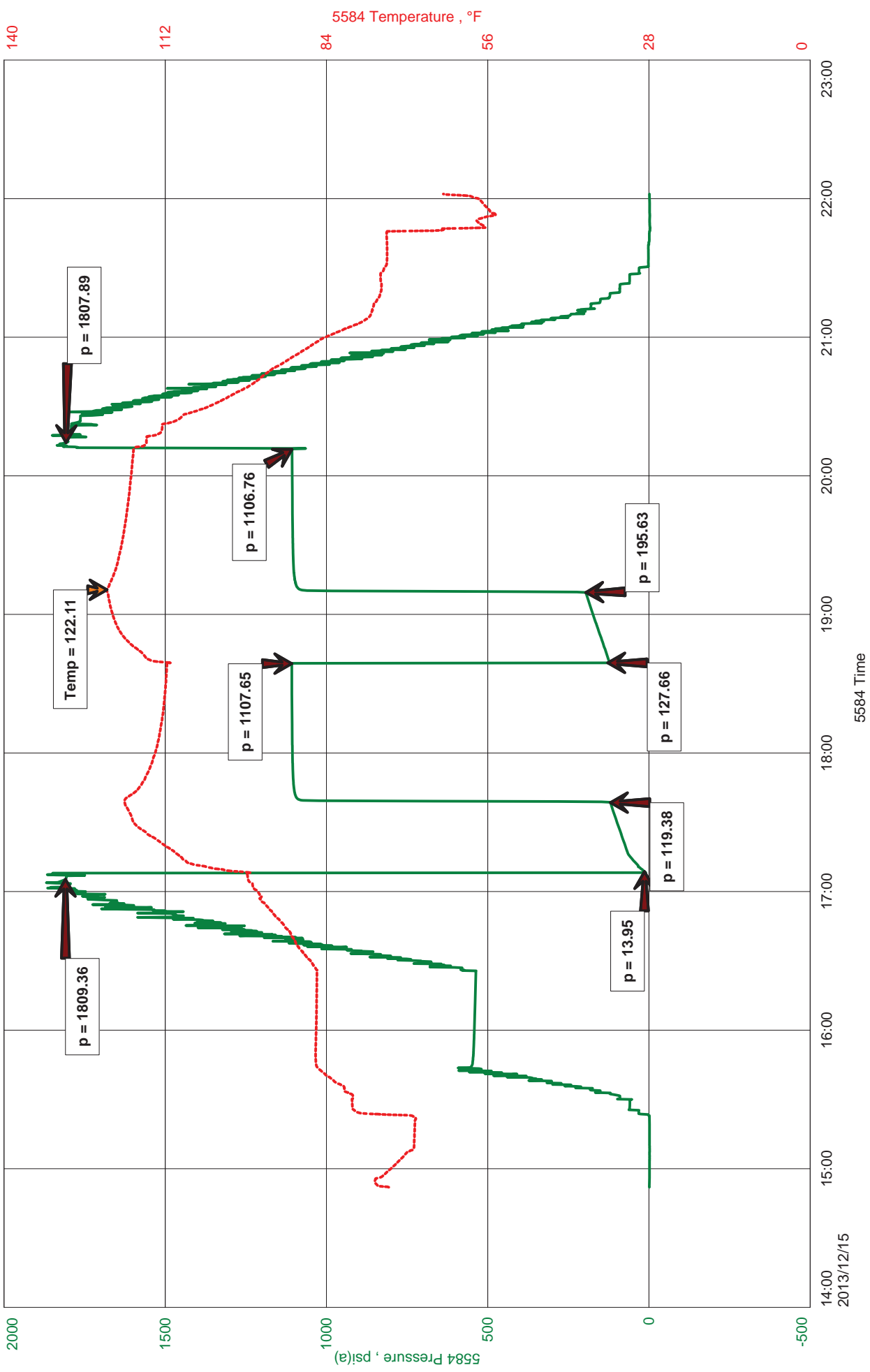
Initial Hydrostatic Pressure..... (A) 1,795 P.S.I.
Initial Flow Period..... Minutes 15 (B) 15 P.S.I. to (C) 122 P.S.I.
Initial Closed In Period..... Minutes 60 (D) 1,129 P.S.I.
Final Flow Period..... Minutes 30 (E) 127 P.S.I. to (F) 246 P.S.I.
Final Closed In Period..... Minutes 60 (G) 1,126 P.S.I.
Final Hydrostatic Pressure..... (H) 1,795 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.

REILLY OIL COMPANY, INC.
DST #3 LKC 'E-F' 3,769' - 3,790'
Start Test Date: 2013/12/15
Final Test Date: 2013/12/15

MARY #1-7
Formation: DST #3 LKC 'E-F' 3,769' - 3,790'

MARY #1-7





**DIAMOND TESTING
ROGER D. FRIEDLY - TESTER
CELL 620-793-2043**

Company Name REILLY OIL COMPANY, INC.
Contact DUSTY RHOADES
Well Name MARY #1-7
Unique Well ID DST #3 LKC 'E-F' 3,769' - 3,790'
Surface Location SEC 7-11S-24W TREGO CNTY, KS

Start Test Date 2013/12/15
Final Test Date 2013/12/15
Test Type CONVENTIONAL
Formation DST #3 LKC 'E-F' 3,769' - 3,790'
Test Purpose Initial Test
Well Fluid Type 01 Oil

Job Number NO. 1
Test Unit
Representative ROGER D. FRIEDLY
Well Operator REILLY OIL COMPANY, INC.
Report Date 2013/12/15
Prepared By ROGER D. FRIEDLY
Qualified By RICHARD BELL
Start Test Time 14:52:00
Final Test Time 22:02:00

Remarks

RECOVERED: 10' CLEAN OIL 25 GRAVITY @ 60 deg.
145' SOSMW 2% OIL, 92% WTR, 6% MUD
245' SW 100% WTR - SCUM OF OIL
400' TOTAL FLUID

TOOL SAMPLE: 3% OIL, 97% WTR

CHLORIDES 65,000 Ppm
PH 7.0
RW .12 @ 75 deg.



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: MARY1-7DST3

TIME ON: 14:52
TIME OFF: 22:02

Company REILLY OIL CO., INC. Lease & Well No. MARY #1-7
Contractor WW RIG #6 Charge to REILLY OIL CO., INC.
Elevation 2,376 KB Formation LKC 'E-F' Effective Pay _____ Ft. Ticket No. _____
Date 12-15-13 Sec. 7 Twp. 11 S Range 24 W County TREGO State KANSAS
Test Approved By RICHARD BELL Diamond Representative ROGER D. FRIEDLY

Formation Test No. 3 Interval Tested from 3,769 ft. to 3,790 ft. Total Depth 3,790 ft.
Packer Depth 3,764 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.
Packer Depth 3,769 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3,757 ft. Recorder Number 5584 Cap. 5,000 P.S.I.
Bottom Recorder Depth (Outside) 3,787 ft. Recorder Number 13498 Cap. 3,925 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chem Viscosity 63 Drill Collar Length 121 ft. I.D. 2 1/4 in.
Weight 9.0 Water Loss 6.8 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 2,700 P.P.M. Drill Pipe Length 3,623 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number N/A Test Tool Length 25 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 19 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: WEAK 1/4" BLOW INCREASING TO BOTTOM OF BUCKET IN 18 MIN (NOBB)
2nd Open: WEAK SUFACE BLOW INCREASING TO 9 1/2" (NOBB)

Recovered 10 ft. of CLEAN OIL 25 GRAVITY @ 60 deg.
Recovered 145 ft. of SOSMW 2% OIL, 92% WTR, 6% MUD
Recovered 245 ft. of SW 100% WTR - SCUM OF OIL
Recovered 400 ft. of TOTAL FLUID CHLORIDES 65,000 Ppm

Recovered _____ ft. of _____	PH 7.0	Price Job
Recovered _____ ft. of _____	RW .12 @ 75 deg.	Other Charges
Remarks: <u>DIESEL IN BUCKET</u>		Insurance
<u>TOOL SAMPLE: 3% OIL, 97% WTR</u>		Total

Time Set Packer(s) 5:08 P.M. A.M. P.M. Time Started Off Bottom 8:08 P.M. A.M. P.M. Maximum Temperature 122

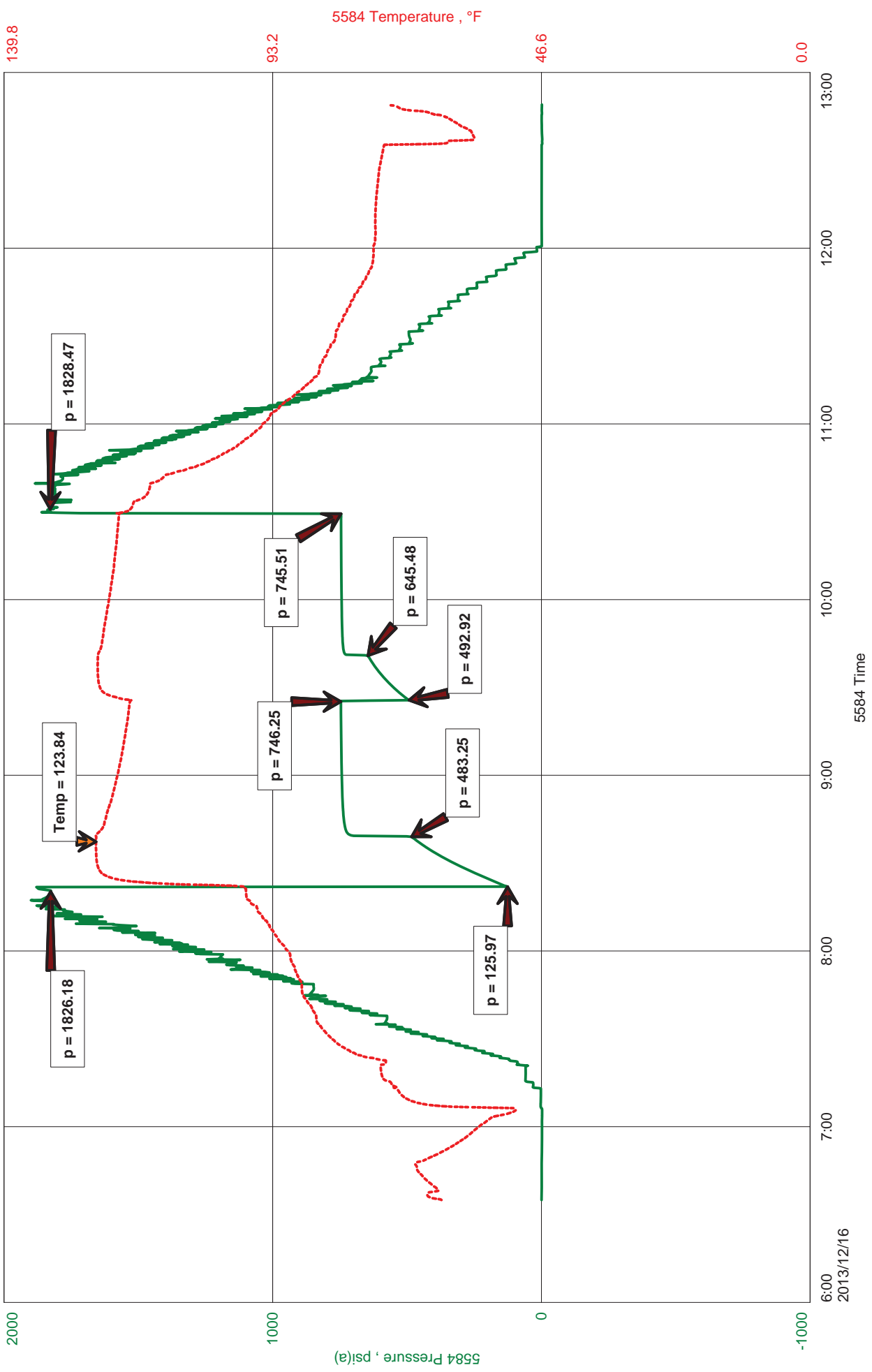
Initial Hydrostatic Pressure..... (A) 1,809 P.S.I.
Initial Flow Period..... Minutes 30 (B) 14 P.S.I. to (C) 119 P.S.I.
Initial Closed In Period..... Minutes 60 (D) 1,108 P.S.I.
Final Flow Period..... Minutes 30 (E) 128 P.S.I. to (F) 196 P.S.I.
Final Closed In Period..... Minutes 60 (G) 1,107 P.S.I.
Final Hydrostatic Pressure..... (H) 1,808 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.

REILLY OIL COMPANY, INC.
DST #4 LKC 'H' 3,824' - 3,845'
Start Test Date: 2013/12/16
Final Test Date: 2013/12/16

MARY #1-7
Formation: DST #4 LKC 'H' 3,824' - 3,845'

MARY #1-7





**DIAMOND TESTING
ROGER D. FRIEDLY - TESTER
CELL 620-793-2043**

Company Name REILLY OIL COMPANY, INC.
Contact DUSTY RHOADES
Well Name MARY #1-7
Unique Well ID DST #4 LKC 'H' 3,824' - 3,845'
Surface Location SEC 7-11S-24W TREGO CNTY, KS

Start Test Date 2013/12/16
Final Test Date 2013/12/16
Test Type CONVENTIONAL
Formation DST #4 LKC 'H' 3,824' - 3,845'
Test Purpose Initial Test
Well Fluid Type 01 Oil

Job Number NO. 1
Test Unit
Representative ROGER D. FRIEDLY
Well Operator REILLY OIL COMPANY, INC.
Report Date 2013/12/16
Prepared By ROGER D. FRIEDLY
Qualified By RICHARD BELL
Start Test Time 06:35:00
Final Test Time 12:49:00

Remarks

RECOVERED: 20' CLEAN OIL 36 GRAVITY @ 60 deg.
92' O&GCWM 10% GAS, 4% OIL, 39% WTR, 47% MUD
372' OCMW 4% OIL, 92% WTR, 4% MUD - SCUM OF OIL
803' MW 98% WTR, 2% MUD
1,287' TOTAL FLUID

TOOL SAMPLE: 37% OIL, 60% WTR, 3% MUD

CHLORIDES 73,000 Ppm
PH 7.0
RW .12 @ 73 deg.



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: MARY1-7DST4

TIME ON: 06:35
TIME OFF: 12:49

Company REILLY OIL CO., INC. Lease & Well No. MARY #1-7
Contractor WW RIG #6 Charge to REILLY OIL CO., INC.
Elevation 2,376 KB Formation LKC 'H' Effective Pay _____ Ft. Ticket No. _____
Date 12-15-13 Sec. 7 Twp. _____ 11 S Range _____ 24 W County TREGO State KANSAS
Test Approved By RICHARD BELL Diamond Representative ROGER D. FRIEDLY

Formation Test No. 4 Interval Tested from 3,824 ft. to 3,845 ft. Total Depth 3,845 ft.
Packer Depth 3,819 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 3,824 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3,812 ft. Recorder Number 5584 Cap. 5,000 P.S.I.
Bottom Recorder Depth (Outside) 3,842 ft. Recorder Number 13498 Cap. 3,925 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chem Viscosity _____ Drill Collar Length 121 ft. I.D. 2 1/4 in.
Weight _____ Water Loss _____ cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides _____ P.P.M. Drill Pipe Length 3,678 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number N/A Test Tool Length 25 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 21 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: **STRONG BLOW OFF BOTTOM OF BUCKET IN 1 MIN** (NOBB)
2nd Open: **STRONG BLOW OFF BOTTOM OF BUCKET IN 2 MIN** (NOBB)

Recovered 20 ft. of CLEAN OIL 36 GRAVITY @ 60 deg.
Recovered 92 ft. of O&GCWM 10% GAS, 4% OIL, 39% WTR, 47% MUD
Recovered 372 ft. of OCMW 4% OIL, 92% WTR, 4% MUD
Recovered 803 ft. of MW 98% WTR, 2% MUD - SCUM OF OIL

Recovered <u>1,287</u> ft. of <u>TOTAL FLUID</u>	<u>CHLORIDES 73,000 Ppm</u>	Price Job
Recovered _____ ft. of _____	<u>PH 7.0</u>	Other Charges
Remarks: _____	<u>RW .12 @ 73 deg</u>	Insurance
<u>DIESEL IN BUCKET</u>		
<u>TOOL SAMPLE: 37% OIL, 60% WTR, 3% MUD</u>		Total

Time Set Packer(s) 8:22 A.M. A.M. P.M. Time Started Off Bottom 10:22 A.M. A.M. P.M. Maximum Temperature 124

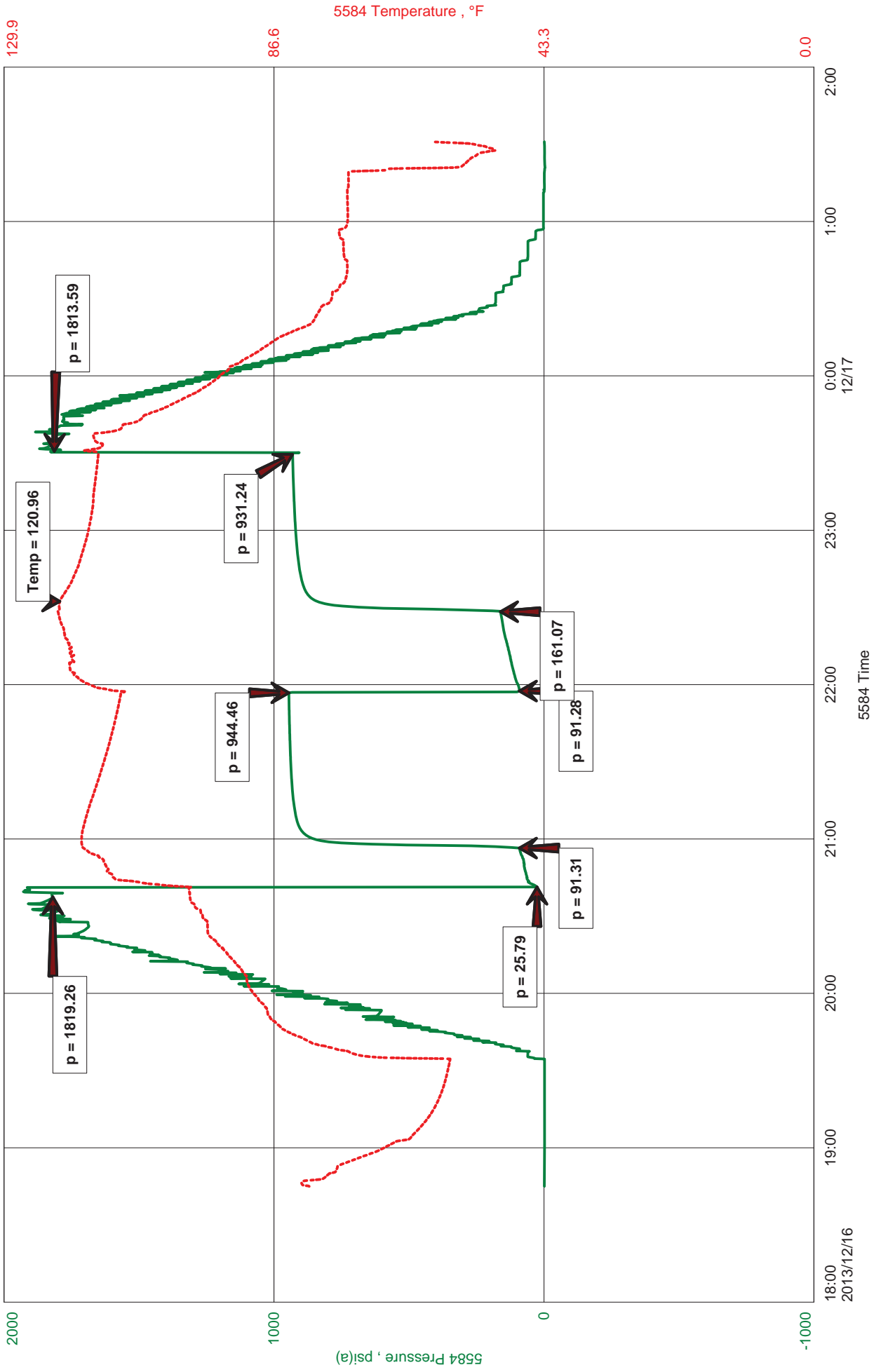
Initial Hydrostatic Pressure..... (A) 1,826 P.S.I.
Initial Flow Period..... Minutes 15 (B) 126 P.S.I. to (C) 483 P.S.I.
Initial Closed In Period..... Minutes 45 (D) 746 P.S.I.
Final Flow Period..... Minutes 15 (E) 493 P.S.I. to (F) 645 P.S.I.
Final Closed In Period..... Minutes 45 (G) 746 P.S.I.
Final Hydrostatic Pressure..... (H) 1,828 P.S.I.

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REILLY OIL COMPANY, INC.
DST #5 LKC '1' 3,854' - 3,873'
Start Test Date: 2013/12/16
Final Test Date: 2013/12/17

MARY #1-7
Formation: DST #5 LKC '1' 3,854' - 3,873'

MARY #1-7





**DIAMOND TESTING
ROGER D. FRIEDLY - TESTER
CELL 620-793-2043**

Company Name REILLY OIL COMPANY, INC.
Contact DUSTY RHOADES
Well Name MARY #1-7
Unique Well ID DST #5 LKC 'I' 3,854' - 3,873'
Surface Location SEC 7-11-24 TREGO CNTY, KS

Start Test Date 2013/12/16
Final Test Date 2013/12/17
Test Type CONVENTIONAL
Formation DST #5 LKC 'I' 3,854' - 3,873'
Test Purpose Initial Test
Well Fluid Type 01 Oil

Job Number NO. 1
Test Unit
Representative ROGER D. FRIEDLY
Well Operator REILLY OIL COMPANY, INC.
Report Date 2013/12/17
Prepared By ROGER D. FRIEDLY
Qualified By RICHARD BELL
Start Test Time 18:45:00
Final Test Time 01:31:00

Remarks

RECOVERED: 750' GAS IN PIPE
341' CLEAN OIL 43.5 GRAVITY @ 60 deg.
31' G&OCMW 5% GAS, 30% OIL, 37% WTR, 27% MUD
121' SW 100% WTR
493' TOTAL FLUID

TOOL SAMPLE: 49% OIL, 51% WTR

CHLORIDES: 63,000 Ppm
PH 7.0
RW .14 @ 66 deg



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: MARY1-7DST5

TIME ON: 18:45 (12.16)
TIME OFF: 01:31(12.17)

Company REILLY OIL CO., INC. Lease & Well No. MARY #1-7
Contractor WW RIG #6 Charge to REILLY OIL CO., INC.
Elevation 2,376 KB Formation LKC 'I' Effective Pay _____ Ft. Ticket No. _____
Date 12-16-13 Sec. 7 Twp. _____ 11 S Range _____ 24 W County TREGO State KANSAS
Test Approved By RICHARD BELL Diamond Representative ROGER D. FRIEDLY

Formation Test No. 5 Interval Tested from 3,854 ft. to 3,873 ft. Total Depth 3,873 ft.
Packer Depth 3,849 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 3,854 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3,842 ft. Recorder Number 5584 Cap. 5,000 P.S.I.
Bottom Recorder Depth (Outside) 3,870 ft. Recorder Number 13498 Cap. 3,925 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chem Viscosity 50 Drill Collar Length 121 ft. I.D. 2 1/4 in.
Weight 9.3 Water Loss 6.0 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 3,800 P.P.M. Drill Pipe Length 3,708 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number N/A Test Tool Length 25 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 19 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: GOOD 2" BLOW INCREASING TO BOTTOM OF BUCKET IN 4 MIN (F 2"BB)
2nd Open: GOOD 2" BLOW INCREASING TO BOTTOM OF BUCKET IN 4 MIN (G 9"BB)

Recovered 750 ft. of GAS IN PIPE
Recovered 341 ft. of GLEAN OIL 43.5 GRAVITY @ 60 deg.
Recovered 31 ft. of G&OCMW 5% GAS, 30% OIL, 37% WTR, 27% MUD

Recovered <u>121</u> ft. of <u>SW 100% WTR</u>	<u>CHLORIDES 63,000 Ppm</u>	
Recovered <u>493</u> ft. of <u>TOTAL FLUID</u>	<u>PH 7.0</u>	Price Job
Recovered _____ ft. of _____	<u>RW .14 @ 66 deg</u>	Other Charges
Remarks: <u>DIESEL IN BUCKET</u>		Insurance
<u>TOOL SAMPLE: 49% OIL, 51% WTR</u>		Total

Time Set Packer(s) 8:41 P.M. A.M. P.M. Time Started Off Bottom 11:26 P.M. A.M. P.M. Maximum Temperature 121

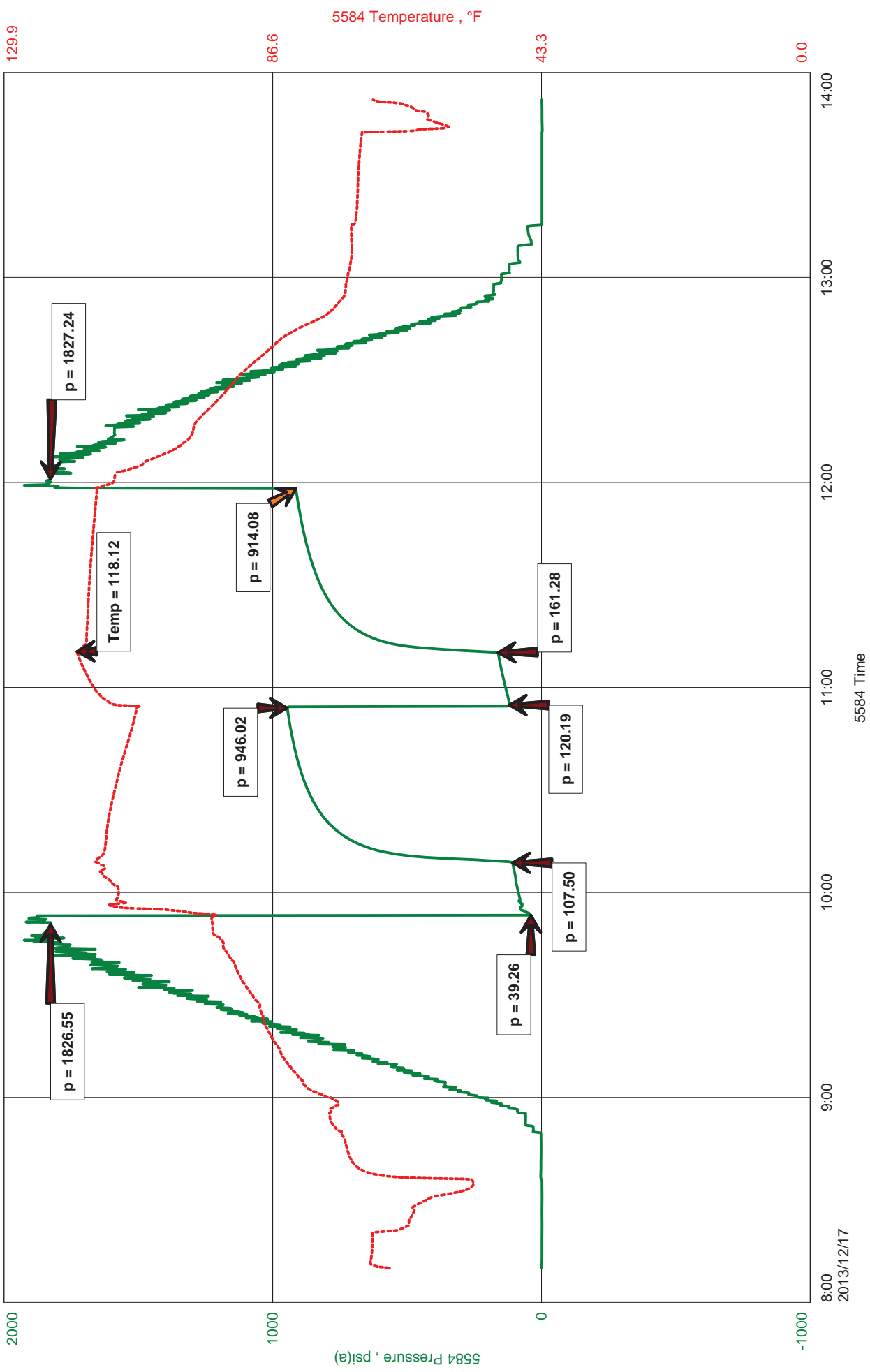
Initial Hydrostatic Pressure..... (A) 1,819 P.S.I.
Initial Flow Period..... Minutes 15 (B) 26 P.S.I. to (C) 91 P.S.I.
Initial Closed In Period..... Minutes 60 (D) 944 P.S.I.
Final Flow Period..... Minutes 30 (E) 91 P.S.I. to (F) 161 P.S.I.
Final Closed In Period..... Minutes 60 (G) 931 P.S.I.
Final Hydrostatic Pressure..... (H) 1,819 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.

REILLY OIL COMPANY OIL, INC.
DST #6 LKC 'J' 3,873' - 3,895'
Start Test Date: 2013/12/17
Final Test Date: 2013/12/17

MARY #1-7
Formation: DST #6 LKC 'J' 3,873' - 3,895'

MARY #1-7





**DIAMOND TESTING
ROGER D. FRIEDLY - TESTER
CELL 620-793-2043**

Company Name REILLY OIL COMPANY OIL, INC.
Contact DUSTY RHOADES
Well Name MARY #1-7
Unique Well ID DST #6 LKC 'J' 3,873' - 3,895'
Surface Location SEC 7-11S-24W TREGO CNTY, KS
Start Test Date 2013/12/17
Final Test Date 2013/12/17
Test Type CONVENTIONAL
Formation DST #6 LKC 'J' 3,873' - 3,895'
Test Purpose Initial Test
Well Fluid Type 01 Oil

Job Number NO. 1
Test Unit
Representative ROGER D, FRIEDLY
Well Operator REILLY OIL COMPANY, INC.
Report Date 2013/12/17
Prepared By ROGER D. FRIEDLY
Qualified By RICHARD BELL
Start Test Time 08:10:00
Final Test Time 13:52:00

Remarks

RECOVERED: 300' GAS IN PIPE
253' SLTWCMO 50% OIL, 7% WTR, 43% MUD
126 SW 100% WTR WITH SCUM OF OIL



DIAMOND TESTING
 P.O. Box 157
HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: MARY1-7DST6

TIME ON: 08:10
 TIME OFF: 13:52

Company REILLY OIL CO., INC. Lease & Well No. MARY #1-7
 Contractor WW RIG #6 Charge to REILLY OIL CO., INC.
 Elevation 2,376 KB Formation LKC 'J' Effective Pay _____ Ft. Ticket No. _____
 Date 12-17-13 Sec. 7 Twp. _____ 11 S Range _____ 24 W County TREGO State KANSAS
 Test Approved By RICHARD BELL Diamond Representative ROGER D. FRIEDLY

Formation Test No. 6 Interval Tested from 3,873 ft. to 3,895 ft. Total Depth 3,895 ft.
 Packer Depth 3,868 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
 Packer Depth 3,873 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3,861 ft. Recorder Number 5584 Cap. 5,000 P.S.I.
 Bottom Recorder Depth (Outside) 3,892 ft. Recorder Number 13498 Cap. 3,925 P.S.I.
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chem Viscosity 50 Drill Collar Length 121 ft. I.D. 2 1/4 in.
 Weight 9.3 Water Loss 6.0 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
 Chlorides 3,800 P.P.M. Drill Pipe Length 3,727 ft. I.D. 3 1/2 in.
 Jars: Make STERLING Serial Number N/A Test Tool Length 25 ft. Tool Size 3 1/2-IF in.
 Did Well Flow? NO Reversed Out NO Anchor Length 22 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: FAIR 2" BLOW INCREASING TO BOTTOM OF BUCKET IN 5 MIN (W 1/8"BB)
 2nd Open: FAIR 2" BLOW INCREASING TO BOTTOM OF BUCKET IN 6 MIN (G 7"BB)

Recovered 300 ft. of GAS IN PIPE
 Recovered 253 ft. of SLTWCMO 50% OIL, 7% WTR, 43% MUD
 Recovered 126 ft. of SW 100% WTR SCUM OF OIL

Recovered <u>379</u> ft. of <u>TOTAL FLUID</u>	<u>CHLORIDES 55,000 Ppm</u>	
Recovered _____ ft. of _____	<u>PH 7.0</u>	Price Job
Recovered _____ ft. of _____	<u>RW .125 @ 81 deg</u>	Other Charges
Remarks: <u>DIESEL IN BUCKET</u>		Insurance
<u>TOOL SAMPLE: 10% GAS, 36% OIL, 40% WTR, 15% MUD</u>		Total

Time Set Packer(s) 9:53 A.M. ^{A.M.}/_{P.M.} Time Started Off Bottom 11:53 A.M. ^{A.M.}/_{P.M.} Maximum Temperature 118

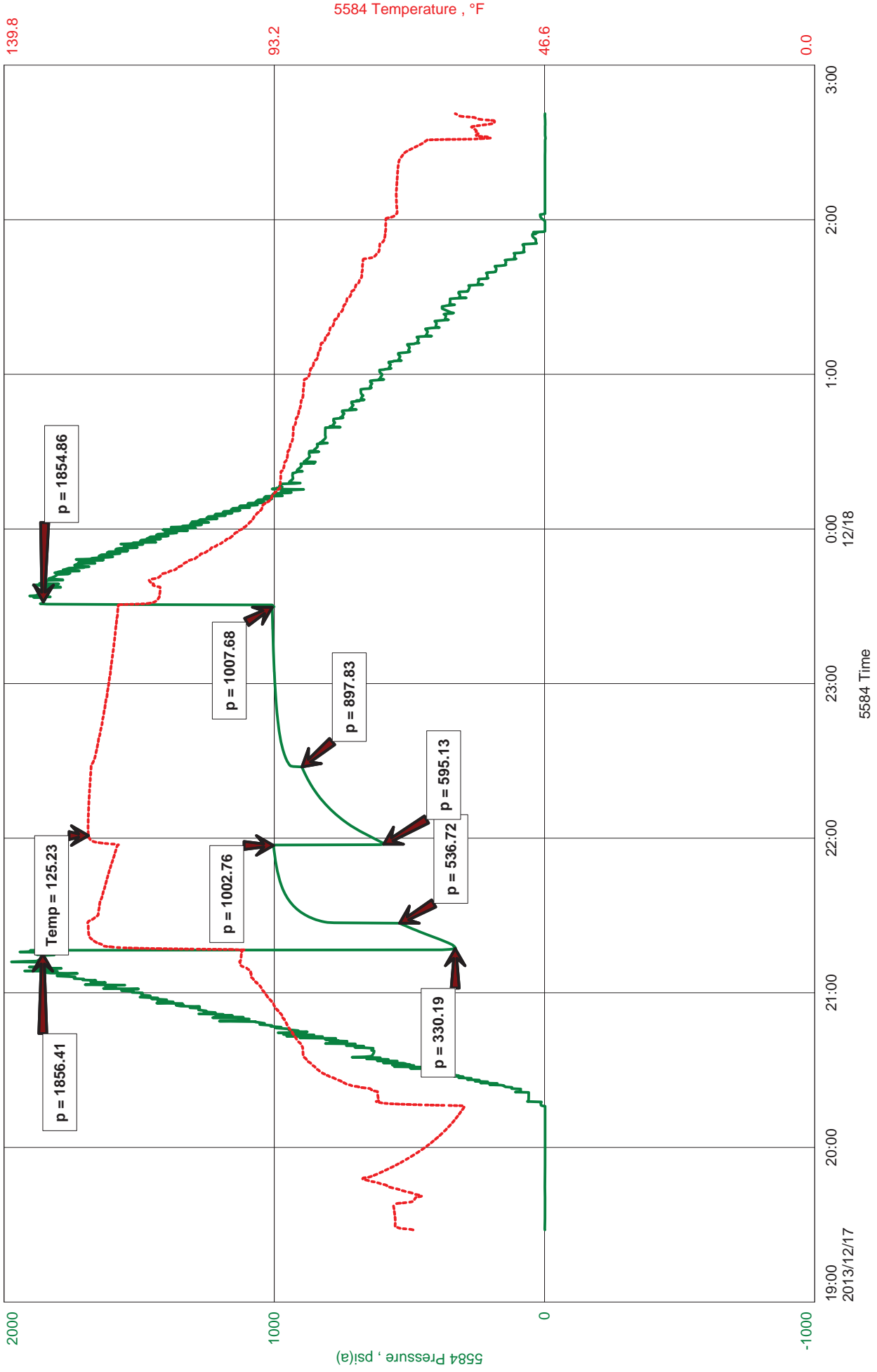
Initial Hydrostatic Pressure..... (A) 1,827 P.S.I.
 Initial Flow Period..... Minutes 15 (B) 39 P.S.I. to (C) 108 P.S.I.
 Initial Closed In Period..... Minutes 45 (D) 946 P.S.I.
 Final Flow Period..... Minutes 15 (E) 120 P.S.I. to (F) 161 P.S.I.
 Final Closed In Period..... Minutes 45 (G) 914 P.S.I.
 Final Hydrostatic Pressure..... (H) 1,827 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.

REILLY OIL COMPANY, INC.
DST #7 LKC 'K' 3,895' - 3,916'
Start Test Date: 2013/12/17
Final Test Date: 2013/12/18

MARY #1-7
Formation: DST #7 LKC 'K' 3,895' - 3,916'

MARY #1-7





**DIAMOND TESTING
ROGER D. FRIEDLY - TESTER
CELL 620-793-2043**

Company Name REILLY OIL COMPANY, INC.
Contact DUSTY RHOADES
Well Name MARY #1-7
Unique Well ID DST #7 LKC 'K' 3,895' - 3,916'
Surface Location SEC 7-11S-24W TREGO CNTY, KS

Start Test Date 2013/12/17
Final Test Date 2013/12/18
Test Type CONVENTIONAL
Formation DST #7 LKC 'K' 3,895' - 3,916'
Test Purpose Initial Test
Well Fluid Type 01 Oil

Job Number
Test Unit NO. 1
Representative ROGER D. FRIEDLY
Well Operator REILLY OIL COMPANL, INC.
Report Date 2013/12/18
Prepared By ROGER D. FRIEDLY
Qualified By RICHARD BELL
Start Test Time 19:28:00
Final Test Time 02:41:00

Remarks

RECOVERED: 186' GAS IN PIPE
20' CLEAN OIL 30.2 GRAVITY @ 60 deg.
62' OCW 40% OIL, 60% WTR
372' MCOW 10% OIL, 85% WTR, 5% MUD
372' G&OCW 2% GAS, 8% OIL, 90% WTR
1,113' SW 100% WTR
1,939' TOTAL FLUID

TOOL SAMPLE: 2% OIL, 98% WTR

CHLORIDES 66,000 Ppm
PH 7.0
RW .12 @ 77 deg.



DIAMOND TESTING
 P.O. Box 157
HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: MARY1-7DST7

TIME ON: 19:28(12.17)
 TIME OFF: 02:41(12.18)

Company REILLY OIL CO., INC. Lease & Well No. MARY #1-7
 Contractor WW RIG #6 Charge to REILLY OIL CO., INC.
 Elevation 2,376 KB Formation LKC 'K' Effective Pay _____ Ft. Ticket No. _____
 Date 12-17-13 Sec. 7 Twp. _____ 11 S Range _____ 24 W County TREGO State KANSAS
 Test Approved By RICHARD BELL Diamond Representative ROGER D. FRIEDLY

Formation Test No. 7 Interval Tested from 3,895 ft. to 3,916 ft. Total Depth 3,916 ft.
 Packer Depth 3,890 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
 Packer Depth 3,895 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3,883 ft. Recorder Number 5584 Cap. 5,000 P.S.I.
 Bottom Recorder Depth (Outside) 3,913 ft. Recorder Number 13498 Cap. 3,925 P.S.I.
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chem Viscosity 53 Drill Collar Length 121 ft. I.D. 2 1/4 in.
 Weight 9.0 Water Loss 6.0 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
 Chlorides 4,700 P.P.M. Drill Pipe Length 3,749 ft. I.D. 3 1/2 in.
 Jars: Make STERLING Serial Number N/A Test Tool Length 25 ft. Tool Size 3 1/2-IF in.
 Did Well Flow? NO Reversed Out NO Anchor Length 21 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: **STRONG BLOW OFF BOTTOM OF BUCKET IN 10 SEC** (W 1/8"BB)
 2nd Open: **STRONG BLOW OFF BOTTOM OF BUCKET IN 30 SEC** (F 1 3/4"BB)

Recovered <u>186</u> ft. of <u>GAS IN PIPE</u>		
Recovered <u>20</u> ft. of <u>CLEAN OIL 30.2 GRAVITY @ 60 deg.</u>		
Recovered <u>62</u> ft. of <u>OCW 40% OIL, 60% WTR</u>		
Recovered <u>372</u> ft. of <u>MCOW 10% OIL, 85% WTR, 5% MUS</u>		
Recovered <u>372</u> ft. of <u>G&OCW 2% GAS, 8% OIL, 90% WTR</u>	<u>CHLORIDES 66,000 Ppm</u>	Price Job
Recovered <u>1,113</u> ft. of <u>SW 100% WTR</u>	<u>PH 7.0</u>	Other Charges
Remarks: <u>1,939 TOTAL FLUID</u>	<u>RW .12 @ 77 deg</u>	Insurance
<u>DIESEL IN BUCKET</u>		
<u>TOOL SAMPLE: 2% OIL, 98% WTR</u>		Total

Time Set Packer(s) 9:17 P.M. A.M. P.M. Time Started Off Bottom 11:27 P.M. A.M. P.M. Maximum Temperature 125

Initial Hydrostatic Pressure..... (A) 1,856 P.S.I.
 Initial Flow Period..... Minutes 10 (B) 330 P.S.I. to (C) 537 P.S.I.
 Initial Closed In Period..... Minutes 30 (D) 1,003 P.S.I.
 Final Flow Period..... Minutes 30 (E) 595 P.S.I. to (F) 898 P.S.I.
 Final Closed In Period..... Minutes 60 (G) 1,008 P.S.I.
 Final Hydrostatic Pressure..... (H) 1,855 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.