

#### Kansas Corporation Commission Oil & Gas Conservation Division

#### 1052279

Form ACO-1

June 2009

Form Must Be Typed

Form must be Signed

All blanks must be Filled

## WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #	API No. 15
Name:	Spot Description:
Address 1:	SecTwpS. R 🗌 East 🗌 West
Address 2:	Feet from North / South Line of Section
City:	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	County:
Name:	Lease Name: Well #:
Wellsite Geologist:	Field Name:
Purchaser:	Producing Formation:
Designate Type of Completion:	Elevation: Ground: Kelly Bushing:
New Well Re-Entry Workover	Total Depth: Plug Back Total Depth:
Oil         WSW         SWD         SIOW           Gas         D&A         ENHR         SIGW           OG         GSW         Temp. Abd.           CM (Coal Bed Methane)         Cathodic         Other (Core, Expl., etc.):	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: sx cmt.
If Workover/Re-entry: Old Well Info as follows:	
Operator: Well Name:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date: Original Total Depth: Deepening Re-perf. Conv. to ENHR Conv. to SWD Conv. to GSW	Chloride content: ppm Fluid volume: bbls  Dewatering method used:
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:
Commingled Permit #:  Dual Completion Permit #:  SWD Permit #:	Operator Name:
☐ ENHR         Permit #:           ☐ GSW         Permit #:	County: Permit #:
Spud Date or Date Reached TD Completion Date or Recompletion Date	

#### **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
Letter of Confidentiality Received
Date:
Confidential Release Date:
Wireline Log Received
Geologist Report Received
UIC Distribution
ALT I II III Approved by: Date:

Side Two



Operator Name:			Lease Name	e:			_ Well #:	
Sec Twp	S. R	East West	County:					
time tool open and clos recovery, and flow rate	sed, flowing and shut s if gas to surface tes	in pressures, whether st, along with final chart	shut-in pressure	reached s	static level,	hydrostatic press	sures, bottom h	ole temperature, fl
Orill Stem Tests Taken		Yes No		Log	Formatio	n (Top), Depth an	d Datum	Sample
•		□ Vos. □ No.	N	lame			Тор	Datum
Cores Taken Electric Log Run Electric Log Submitted (If no, Submit Copy)	I Electronically	Yes No Yes No Yes No						
List All E. Logs Run:			_		_			
	RUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of dill stems tests giving interval tested on dop and actions (flowing and shuth pressures, whether shuths pressure use and bed static level. Hydrostatic pressures, bottom hole temperature, fluid on open and closer, flowing and shuth pressures, whether shuths up ressure shuths and pressures. Detail all cores. Report all final copies of dill stems tests giving interval tested on positions of the shuth pressures, whether shuths pressure shuths and pressures. Detail final charges, and flow rates if gas to surface test, along with final charges). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wireogas surveyed. Attach final geological well site report.  Seen Tests Taken    Ves							
Purpose of String								
		ADDITIONA	L OFMENTING (	00115575	DECORD			
		ADDITIONA	L CEMENTING / :	SQUEEZE	RECORD			
Protect Casing	Depth Top Bottom	Type of Cement	# Sacks Used Typ			Type and F	Percent Additives	
Shots Per Foot							•	
TUBING RECORD:	Size:	Set At:	Packer At:	Line	r Run:	Yes No		
Date of First, Resumed I	Production, SWD or ENI			Gas Li	ift C	Other (Explain)		
Estimated Production Per 24 Hours	Oil E	Bbls. Gas	Mcf	Water	В	bls. (	Gas-Oil Ratio	Gravity
Vented Sold	Used on Lease		Perf. D	ually Comp	. Cor		PRODUCTIO	ON INTERVAL:
(If vented, Sub	mit ACO-18.)	Other (Specify) _						

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	RIEDEL FAMILY 'A' 1-26
Doc ID	1052279

## All Electric Logs Run

Sonic	
Micro	
Dual Induction	
Compensated Density/Neutron	

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	RIEDEL FAMILY 'A' 1-26
Doc ID	1052279

## Tops

Name	Тор	Datum
Top Anhydrite	1690	+652
Base Anhydrite	1732	+610
Topeka	3392	-1050
Heebner	3626	-1284
Toronto	3644	-1302
LKC	3664	-1323
ВКС	3908	-1566
Marmaton	3986	-1644
Arbuckel	4040	-1698

# ALLIED CEMENTING CO., LLC. 034107

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31 SERVICE POINT: RUSSELL, KANSAS 67665 TWP SEC. RANGE CALLED OUT ON LOCATION JOB START JOB FINISH DATE 2 ~17-2011 10:30 pm 11:00 PM ReiDeL eidel ASE FAMILY WELL # A -1-26 LOCATION FILES KS. Rigo- I-70 Exi7 COUNTY TREGO OLD OR NEW (Circle one) 6 504TH 1/2 E 44 N INTO Discovery Dela Rig#3 **CONTRACTOR OWNER** ROTARY / Plug TYPE OF JOB HOLE SIZE 7% CEMENT CASING SIZE & 5/8 SURFACE DEPTH AMOUNT ORDERED 245 SX 140 48 GRL 222 **TUBING SIZE** DEPTH Y4#F10-Seal DRILL PIPE 42 x-ル DEPTH TOOL DEPTH PRES. MAX **MINIMUM** @ 13,50 1984,50 COMMON MEAS. LINE SHOE JOINT @ 7,55 739,90 POZMIX CEMENT LEFT IN CSG. GEL @20,25 /62,00 PERFS. **CHLORIDE** DISPLACEMENT @ **EQUIPMENT** Flo Seil 61 th CEMENTER GOLENN **PUMP TRUCK** HELPER WOODY <u> 398</u> **(**a) **BULK TRUCK** @ **@** 481 BULK TRUCK DRIVER HANDLING 245 MILEAGE 1/0/sk/pmile REMARKS: TOTAL 3905,60 25 SX @ 4016 25 SX @ 1700 SERVICE 100 Sx @ 930 40 Sx @ 270 DEPTH OF JOB Simple sx @ 40' & wifep PUMP TRUCK CHARGE 15 5X @ mousehole EXTRA FOOTAGE (a) 30-SX@ Rathere MILEAGE /3 @ 7,00 MANIFOLD \_\_\_\_ @ CHARGE TO: DOWNING & Nelson Oil Co TOTAL \_/082 05 STREET CITY\_\_\_\_\_STATE\_\_\_\_ZIP PLUG & FLOAT EQUIPMENT 85/8 WiPER Plug @ To Allied Cementing Co., LLC. Vou are hereby requested to rent comenting equinment

Marc Downing
Consulting Petroleum Geologist
1411 Washington Circle
Hays, Ks 67601
Phone: 620-428-1356 (cell) 785-621-2286

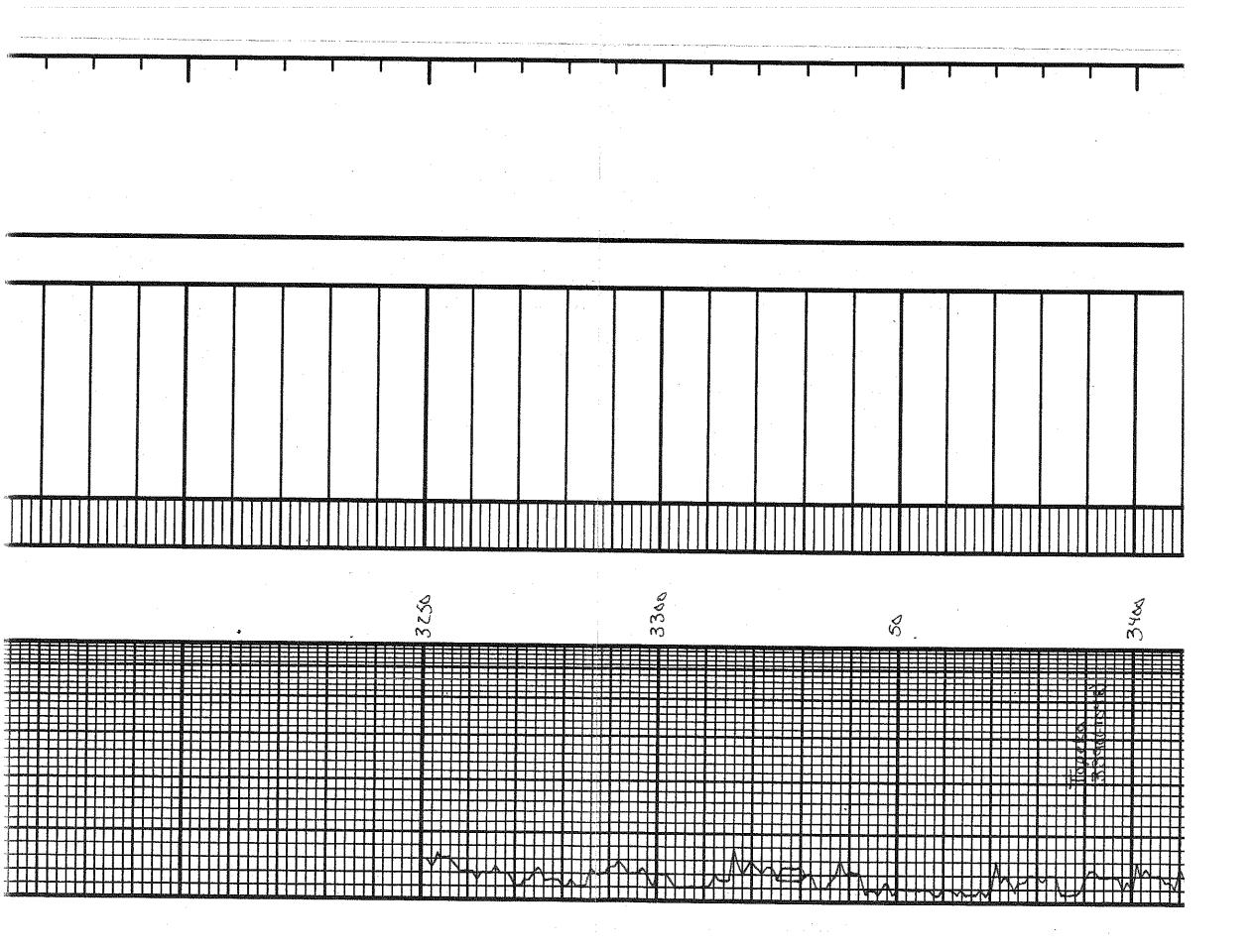
GEOLOGIC REPORT LOG

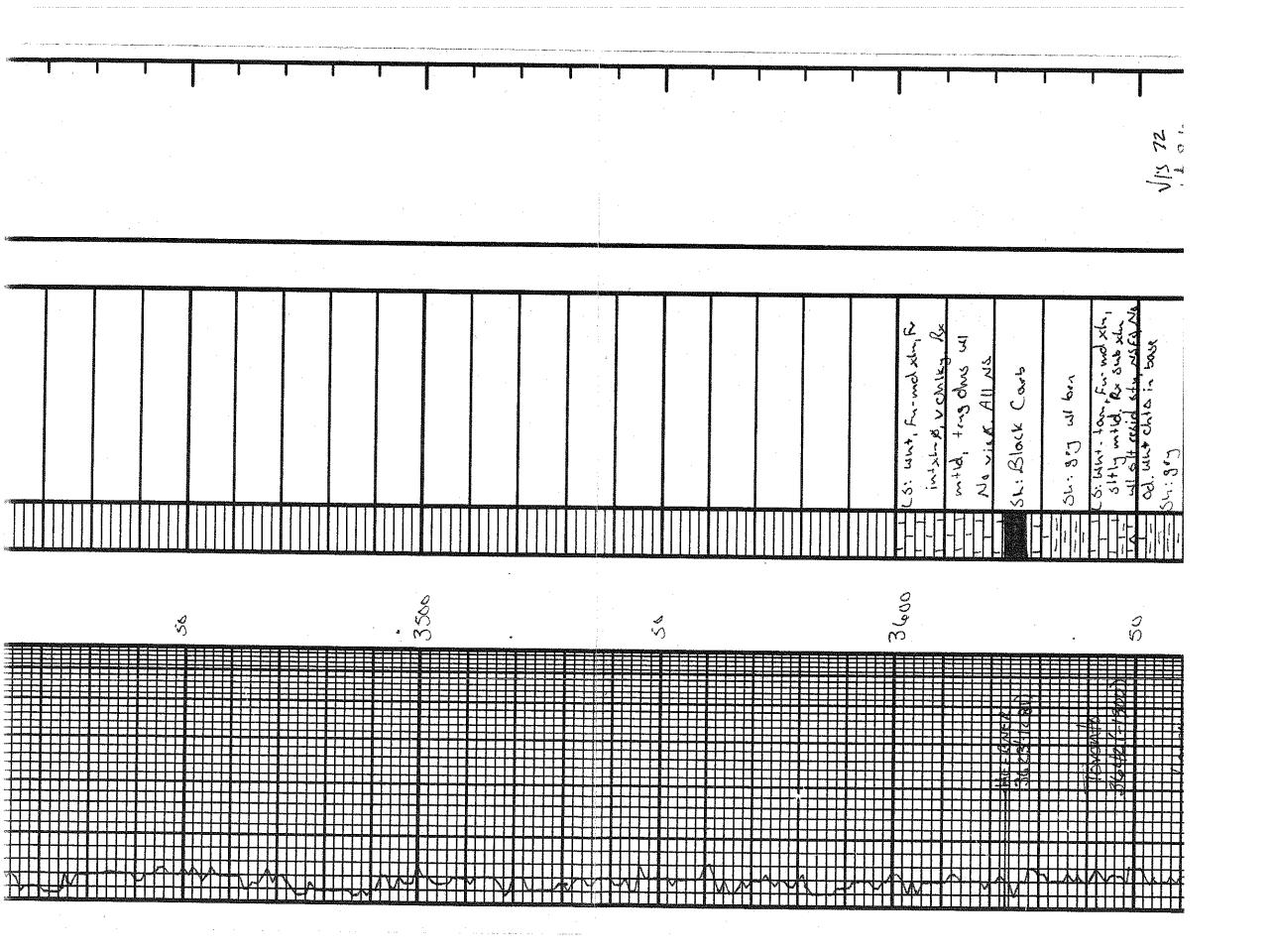
COMPANY Downing Nelson Oil Co., Inc.	13, 21.
WELL Riedel Family HI-24 FIELD Wildcat	74-
LOCATION 900' FSC & 1990' FUL	PRODUCTION Dry
SEC. ZL. TWP. 135 RGE. ZIW	ELEVATION KB <u>2342</u> DF
COUNTY Trego	GL 2334
STATE Kansas	Drilling Measured Fras: KR Samples Saved Fras Riabs To: TD
OPERATOR AND I	Drilling Time From 3250 To: TD Samples Examined From: 3600 To: TD
CONTRACTOR Discovery Drilling, Rig #3	Geological Supervision From 3250 To Total Depth Wellsite Geologist M.Dashiha A.Dkimas
CASING RECORD  SURF: 85/8 - 222 PROD:	Electrical Surveye <u>Superior</u> CNK/GR — Microlog
TOTAL DEPTH DRILLERS: 4/20 TOTAL DEPTH LOG 4/22	Aval Induction - Sonic
TANK TIAN TARA ALE	

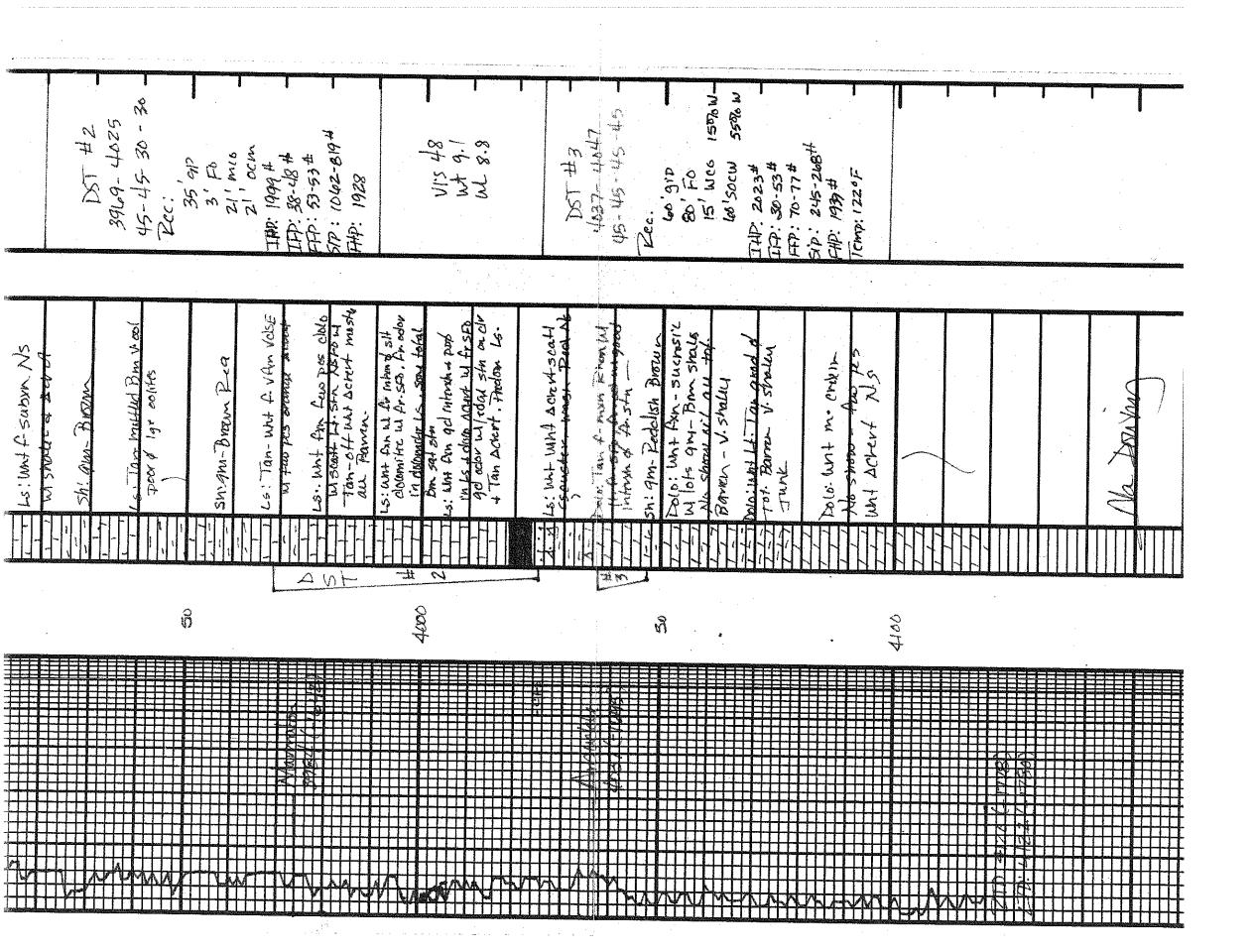
FORMATION TO	)PS AND STRU	CTURAL POS	TION	
FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB-SEA DATUM	STRUCTURAL POSITION
Anhydvile	1688	1690	+652	-41
Basy	1630	1737	+610	41,
Tepela	3390	3392	-1056	
Leconer Toronto	3642 3642	3626 3644	- 1284 - 1302	- 12
BLC	3661	3664	- 1323	- <i>l</i> 3
mamato	<b>3984</b>	398R 3986	-1566 -1644	-13 -18
Availle.	4027	404	- 1648	-6
REFERENCE WELL FOR STRU	CTURE JANE	erial Oil	Co.	

	DATE DEPTH NO SIZE MAKE TYPE DEPTH OUT FEET  NO SIZE MAKE TYPE DEPTH OUT F	andre <u>a, and</u> a Silvige y						
DATE	DEPTH	NO	SIZE	MAKE			FEET	HOUR
	· · · · · · · · · · · · · · · · · · ·							
· .								
	:							
				ļI		<u> </u>		
	# 1 - Trum				·			
	· · · · · · · · · · · · · · · · · · ·				·		<del> </del>	
			XXXXII AMARIAN				<del> </del>	<u> </u>
			71011					
							<u> </u>	
							<b>—</b>	
							<u> </u>	
FORMATION	INTERVAL		DE	SCRIPTION OF	SHOW		LOG A	KALYSIS
						THE WAS IN COLUMN TO SERVICE OF THE	0	S.W
•		;						
				•				
•						_		
				•		`	İ	
		`		W-14-1		Moode mag-node-pressure		<del> </del>
4		,			•			
								•
						***************************************		
	1.							
DAILY PENETRATION DATE DEPTH NO  FORMATION INTERVAL	•							
						***************************************	<del></del>	
						ĺ		
		•						
	<del>                                     </del>		•	Billion and the Company of the Company			-	,
				•		1000		
					•			
			***					
		•	•				and the second	_
				Daniel Windship Rod ( propose majorana popular				Ezert Colonia del Armonyomoro

	Y .			DRILL S	ITEM TES	STS	•	. :				l		
Vo.	Interval	IFP/Time	ISIP/Time	FFP/Time	FSIP/Time	(181-776)	RECOVER	Υ						
			·							20	YEMAKKS			
		,							Dolomite	L C	Ž			
									A A A A A A A A A A A A A A A A A A A	OIL SHOW	S			
						·			Ool.Lime		PTIONS			
							ann an Amhaigh ann a Amhaigh ann an Amhaigh ann an Amhai	promites de la companya de la compa	C Filtresida		YLE DESCRIPTIONS			
							- Allery de la grande de la companya de la company		EGEND  Corb et Li		SAMPLE			
					·				Shale	LITHOLOGY				
									andetone	DEPTH				
ARKS	AND RECOMMENDAT	ا سد	nichu	mi -	PASIFIC	Mal	LAN F	34P4						
£	4. 257		/ <b>\</b>	s : I	81	Was	Nugg			≥ \$	50-			
									Anhydrite					Ш
The construction of the co								neime of the control	MANAGEMENT OF THE PROPERTY OF	DRILLING TIN PE Rate of Penet				
								9194		8 8				







Ł



Riedel Family A 1-26

PO Box 372 **26-13-21/Trego** 

Time

Hays, Ks 67601 Job Ticket: 41780

ATTN: Marc Downing Test Start: 2011.02.15 @ 08:22:32

**GENERAL INFORMATION:** 

Formation: LKC "C-E"

Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole

Time Tool Opened: 10:27:31 Tester: Brian Fairbank

Time Test Ended: 14:54:31 Unit No:

Interval: 3683.00 ft (KB) To 3740.00 ft (KB) (TVD) Reference Elevations: 2342.00 ft (KB)

Total Depth: 3740.00 ft (KB) (TVD) 2334.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: KB to GR/CF: 8.00 ft

Serial #: 8372 Inside

Press@RunDepth: 68.42 psig @ 3690.00 ft (KB) Capacity: 8000.00 psig

 Start Date:
 2011.02.15
 End Date:
 2011.02.15
 Last Calib.:
 2011.02.15

 Start Time:
 08:22:32
 End Time:
 14:54:31
 Time On Btm:
 2011.02.15 @ 10:26:31

Time Off Btm: 2011.02.15 @ 13:32:31

PRESSURE SUMMARY

Pressure Temp Annotation

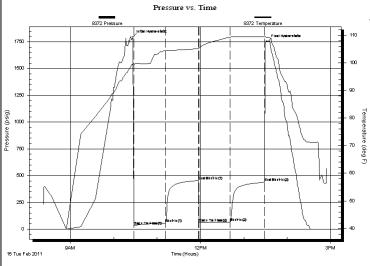
DST#: 1

TEST COMMENT: IFP - w eak to fair blow 1/2" - 3 1/2"

ISI - no blow back

FFP - w eak blow throughout sur - 2"

FSI - no blow back



	(Min.)	(psig)	(deg F)	
	0	1794.28	99.84	Initial Hydro-static
	1	34.06	99.49	Open To Flow (1)
	45	57.98	104.40	Shut-In(1)
Т	91	454.30	105.12	End Shut-In(1)
Temperature	91	61.52	105.22	Open To Flow (2)
rature	135	68.42	109.26	Shut-In(2)
(deg l	182	438.20	109.42	End Shut-In(2)
F)	186	1750.25	109.22	Final Hydro-static
			1	

Cac Datas

#### Recovery

Length (ft)	Description	Volume (bbl)
85.00	mud 100%	0.90
ļ	+	

Gas raics			
	Choko (inchos)	Proceuro (peig)	Gas Pato (Mof/d)

Trilobite Testing, Inc Ref. No: 41780 Printed: 2011.02.15 @ 16:11:23 Page 1



**FLUID SUMMARY** 

DNOC Riedel Family A 1-26

PO Box 372 **26-13-21/Trego** 

Hays, Ks 67601 Job Ticket: 41780 **DST#:1** 

ATTN: Marc Downing Test Start: 2011.02.15 @ 08:22:32

Serial #:

**Mud and Cushion Information** 

Mud Type:Gel ChemCushion Type:Oil A Pl:deg A PlMud Weight:9.00 lb/galCushion Length:ftWater Salinity:ppm

Mud Weight: 9.00 lb/gal Cushion Length: ft
Viscosity: 72.00 sec/qt Cushion Volume: bbl

Water Loss: 7.60 in<sup>3</sup> Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 1500.00 ppm Filter Cake: inches

#### **Recovery Information**

#### Recovery Table

Length ft	Description	Volume bbl
85.00	mud 100%	0.901

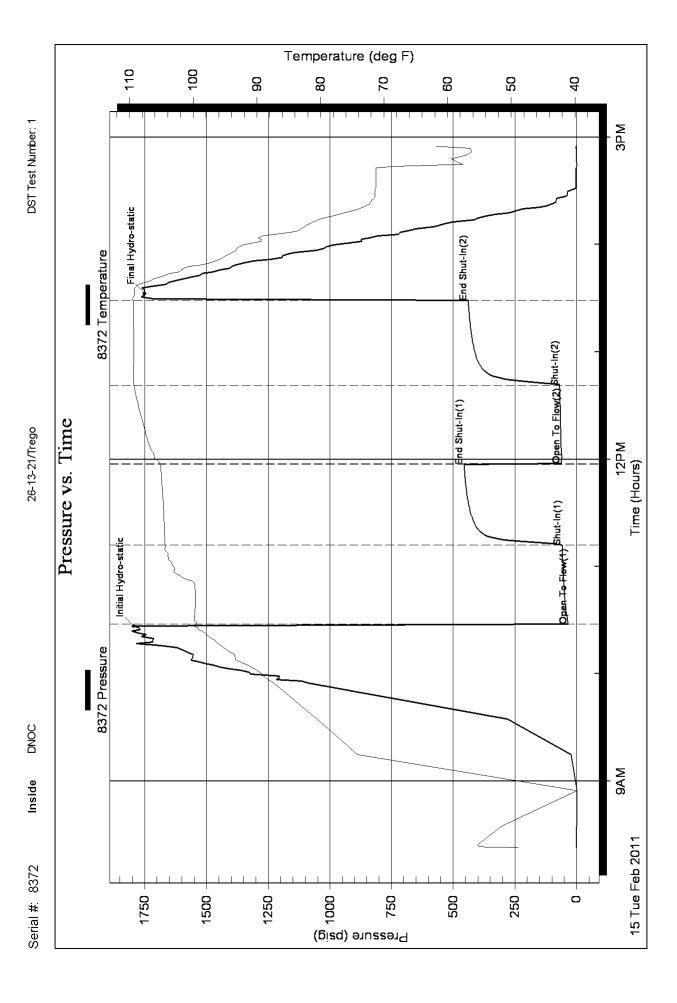
Total Length: 85.00 ft Total Volume: 0.901 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0

Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 41780 Printed: 2011.02.15 @ 16:11:25 Page 2



Page 3 Printed: 2011.02.15 @ 16:11:25 41780 Ref. No:

Trilobite Testing, Inc



DNOC

Riedel Family A 1-26

PO Box 372

Hays, Ks 67601

ATTN: Marc Downing

26-13-21/Trego

Tester:

Unit No:

Job Ticket: 41781 **DST#:2** 

Test Start: 2011.02.16 @ 08:00:33

#### **GENERAL INFORMATION:**

Formation: Marmaton

Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole

Time Tool Opened: 10:04:02 Time Test Ended: 14:10:02

Interval: 3969.00 ft (KB) To 4025.00 ft (KB) (TVD)

Total Depth: 4025.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 2342.00 ft (KB)

Brian Fairbank

2334.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8372 Inside

Press@RunDepth: 53.20 psig @ 3974.00 ft (KB) Capacity: 8000.00 psig

 Start Date:
 2011.02.16
 End Date:
 2011.02.16
 Last Calib.:
 2011.02.16

 Start Time:
 08:00:33
 End Time:
 14:10:02
 Time On Btm:
 2011.02.16 @ 10:03:02

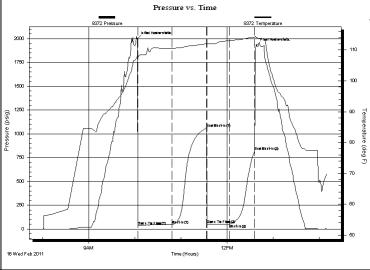
Time Off Btm: 2011.02.16 @ 12:38:32

TEST COMMENT: IFP - w eak blow throughout 1/4" - 1 1/2"

ISI - no blow back

FFP - w eak blow throughout sur - 3/4"

FSI - no blow back



#### PRESSURE SUMMARY

•	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	7 timotation
	0	1999.19	108.03	Initial Hydro-static
	1	37.88	107.46	Open To Flow (1)
	45	47.55	110.56	Shut-In(1)
	90	1062.24	112.02	End Shut-In(1)
	91	52.48	111.95	Open To Flow (2)
	121	53.20	113.08	Shut-In(2)
	153	818.52	114.19	End Shut-In(2)
	156	1928.27	113.99	Final Hydro-static

#### Recovery

Length (ft)	Description	Volume (bbl)
21.00	21.00 OCM 10%O, 90%M 21.00 MCO 50%O, 50%M 3.00 FREE OIL 95%O, 5%M	
21.00		
3.00		
0.00 35' GIP		0.00

#### Gas Rates

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

Trilobite Testing, Inc Ref. No: 41781 Printed: 2011.02.16 @ 16:50:40 Page 1



**FLUID SUMMARY** 

ppm

DNOC Riedel Family A 1-26

PO Box 372 **26-13-21/Trego** 

Hays, Ks 57601 Job Ticket: 41781 **DST#:2** 

ATTN: Marc Downing Test Start: 2011.02.16 @ 08:00:33

#### **Mud and Cushion Information**

Mud Type: Gel Chem Cushion Type: Oil API: 31 deg API

Mud Weight: 9.00 lb/gal Cushion Length: ft Water Salinity:

Viscosity: 50.00 sec/qt Cushion Volume: bbl

Water Loss: 7.98 in³ Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 3000.00 ppm Filter Cake: inches

#### **Recovery Information**

#### Recovery Table

Length ft	Description	Volume bbl
21.00	OCM 10%O, 90%M	0.103
21.00	MCO 50%O, 50%M	0.194
3.00	FREE OIL 95%O, 5%M	0.042
0.00	35' GIP	0.000

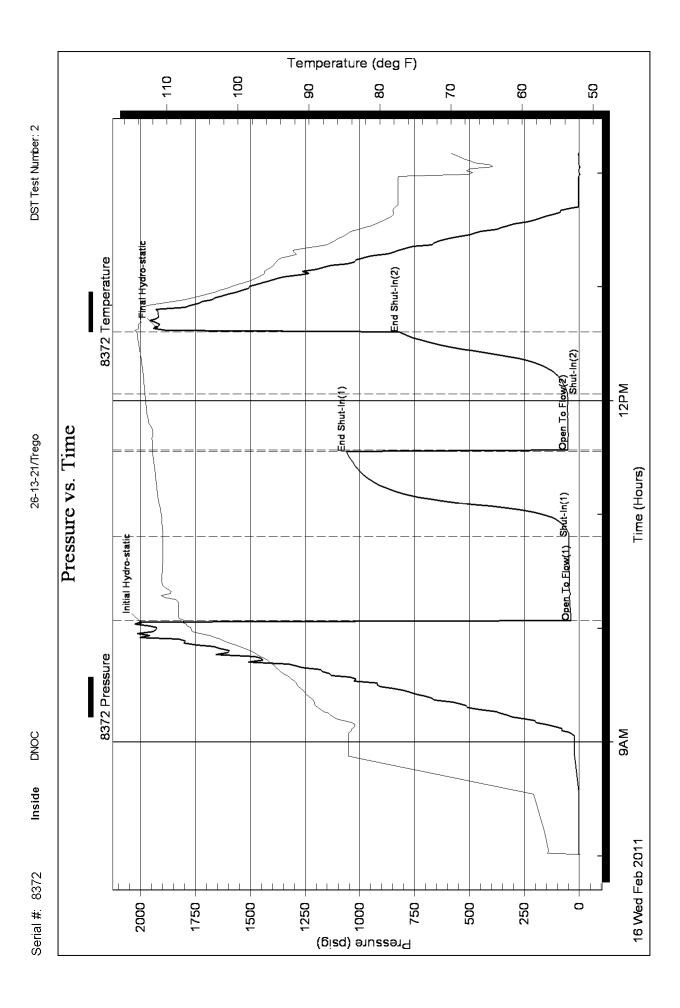
Total Length: 45.00 ft Total Volume: 0.339 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 41781 Printed: 2011.02.16 @ 16:50:41 Page 2



Printed: 2011.02.16 @ 16:50:41 41781 Ref. No: Trilobite Testing, Inc

Page 3



DNOC

Riedel Family A 1-26

PO Box 372 Hays, Ks

67601

ATTN: Marc Downing

26-13-21/Trego

Job Ticket: 41782 DST#: 3

Test Start: 2011.02.16 @ 20:23:03

#### **GENERAL INFORMATION:**

Formation: **Arbuckle** 

Deviated: Whipstock: No ft (KB)

Time Tool Opened: 22:18:32 Time Test Ended: 03:13:02

Interval: 4037.00 ft (KB) To 4047.00 ft (KB) (TVD)

Total Depth: 4037.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Test Type: Conventional Bottom Hole

Tester:

Brian Fairbank

Unit No:

Reference Elevations:

2342.00 ft (KB)

2334.00 ft (CF) KB to GR/CF: 8.00 ft

Serial #: 8372 Press@RunDepth:

Start Date:

Start Time:

Inside

76.70 psig @ 2011.02.16

20:23:03

4039.00 ft (KB) End Date:

End Time:

2011.02.17

03:13:02

Capacity: Last Calib.: 8000.00 psig

Time On Btm:

2011.02.17 2011.02.16 @ 22:17:02

Time Off Btm:

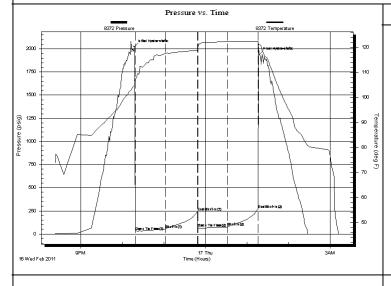
2011.02.17 @ 01:18:02

TEST COMMENT: IFP - BOB 43 min

ISI - no blow back

FFP - w eak to good blow sur - 6"

FSI - no blow back



#### PRESSURE SUMMARY

Time	Pressure	Temp	Annotation
(Min.)	(psig)	(deg F)	
0	2023.42	104.71	Initial Hydro-static
2	30.33	107.26	Open To Flow (1)
45	52.62	117.45	Shut-In(1)
91	244.47	118.78	End Shut-In(1)
92	69.71	120.14	Open To Flow (2)
135	76.70	122.25	Shut-In(2)
179	267.66	122.29	End Shut-In(2)
181	1938.82	120.93	Final Hydro-static

#### Recovery

Description	Volume (bbl)
50.00 SOCMW 5%O, 55%W, 40%M	
W & MCO 55%O, 15%W, 30%M	0.21
80.00 FREE OIL 95%O, 5%M 0.00 60' GIP	
_	
	SOCMW 5%O, 55%W, 40%M W & MCO 55%O, 15%W, 30%M FREE OIL 95%O, 5%M

#### Gas Rates

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

Trilobite Testing, Inc. Ref. No: 41782 Printed: 2011.02.17 @ 08:48:29 Page 1



**FLUID SUMMARY** 

DNOC Riedel Family A 1-26

PO Box 372 **26-13-21/Trego** 

Hays, Ks 57601 Job Ticket: 41782 **DST#: 3** 

ATTN: Marc Downing Test Start: 2011.02.16 @ 20:23:03

#### **Mud and Cushion Information**

Mud Type: Gel Chem Cushion Type: Oil API: 40 deg API

Mud Weight: 9.00 lb/gal Cushion Length: ft Water Salinity: 42000 ppm

Viscosity: 48.00 sec/qt Cushion Volume: bbl

Water Loss: 8.78 in³ Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 4000.00 ppm Filter Cake: inches

#### **Recovery Information**

#### Recovery Table

Length ft	Description	Volume bbl
60.00	SOCMW 5%O, 55%W, 40%M	0.550
15.00	W & MCO 55%O, 15%W, 30%M	0.210
80.00	FREE OIL 95%O, 5%M	1.122
0.00	60' GIP	0.000

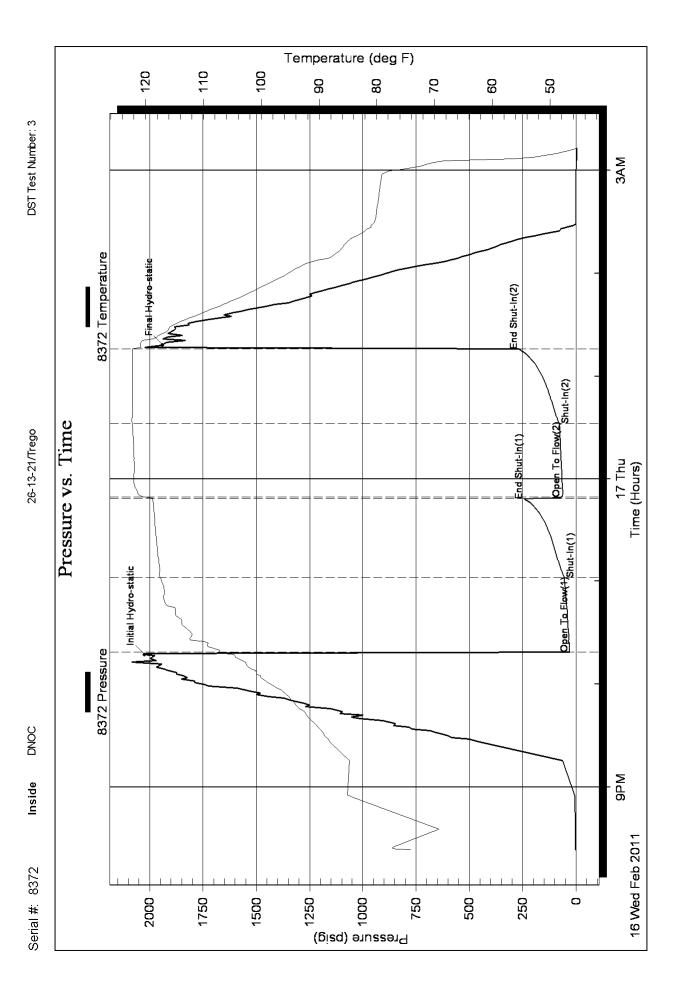
Total Length: 155.00 ft Total Volume: 1.882 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 41782 Printed: 2011.02.17 @ 08:48:30 Page 2



Page 3 Printed: 2011.02.17 @ 08:48:31 41782

Ref. No:

Trilobite Testing, Inc