KOLAR Document ID: 1467683

Confidentiality Requested:

Yes No

Kansas Corporation Commission Oil & Gas Conservation Division

Form ACO-1
January 2018
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.:
Name:	Spot Description:
Address 1:	
Address 2:	Feet from North / South Line of Section
City: State: Zip: +	Feet from _ East / _ West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxxx) (e.gxxx.xxxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
☐ Oil ☐ WSW ☐ SWD	Elevation: Ground: Kelly Bushing:
☐ Gas ☐ DH ☐ EOR	Total Vertical Depth: Plug Back Total Depth:
☐ OG ☐ GSW	Amount of Surface Pipe Set and Cemented at: Feet
CM (Coal Bed Methane)	
Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used?
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet
Operator:	If Alternate II completion, cement circulated from:
Well Name:	feet depth to:w/sx cmt.
Original Comp. Date: Original Total Depth:	
☐ Deepening ☐ Re-perf. ☐ Conv. to EOR ☐ Conv. to SWD	Drilling Fluid Management Plan
☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer	(Data must be collected from the Reserve Pit)
Described	Chloride content: ppm Fluid volume: bbls
☐ Commingled Permit #:	Dewatering method used:
SWD Permit #:	Location of fluid disposal if hauled offsite:
EOR Permit #:	Location of fluid disposal if flauled offsite.
GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R
Recompletion Date Recompletion Date	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 Drill Stem Tests Received						
Geologist Report / Mud Logs Received						
UIC Distribution						
ALT I II Approved by: Date:						

KOLAR Document ID: 1467683

Page Two

Operator Name: _	Lease Na						Well #:			
Sec Twp.	S. R.	E	ast West	County:						
	flowing and shu	ut-in pressures, v	vhether shut-in pre	ssure reached st	atic level, hydrosta	tic pressures, bot		val tested, time tool erature, fluid recovery,		
Final Radioactivity files must be subm						iled to kcc-well-lo	gs@kcc.ks.gov	v. Digital electronic log		
Drill Stem Tests Ta			Yes No			Formation (Top), Depth and Datum				
Samples Sent to 0	Geological Surv	/ey	Yes No	Na	me		Тор	Datum		
Cores Taken Electric Log Run Geologist Report / List All E. Logs Ru	_		Yes No Yes No Yes No							
		B	CASING eport all strings set-c		New Used	ion, etc.				
Purpose of Strir		Hole illed	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives		
			ADDITIONAL	CEMENTING / SO	UEEZE RECORD					
Purpose:		epth T Bottom	ype of Cement	# Sacks Used	ed Type and Percent Additives					
Perforate Protect Casi Plug Back T										
Plug Off Zor										
Did you perform a Does the volume Was the hydraulic	of the total base f	fluid of the hydrauli		_	=	No (If No, sk	ip questions 2 an ip question 3) out Page Three	,		
Date of first Product Injection:	tion/Injection or R	esumed Production	Producing Meth	nod:	Gas Lift 0	Other (Explain)				
Estimated Production Per 24 Hours	on	Oil Bbls.		Mcf Water Bbls. Gas-Oil Ratio			Gravity			
DISPOS	SITION OF GAS:		N	METHOD OF COMP	LETION:			DN INTERVAL: Bottom		
	Sold Used	I on Lease	Open Hole			mmingled mit ACO-4)	Тор	BOROTT		
,	,			B.11 B1						
Shots Per Foot					Acid,	Fracture, Shot, Cer (Amount and Kind	menting Squeeze I of Material Used)	Record		
TUBING RECORD:	: Size:	Set	Δ+-	Packer At:						
TODING RECORD:	. 3126.		n.	i donei Al.						

Form	ACO1 - Well Completion
Operator	Darrah Oil Company, LLC
Well Name	PORSCH UNIT 1-3
Doc ID	1467683

All Electric Logs Run

Micro	
Por	
Dual Ind	
Sonic	

Form	ACO1 - Well Completion
Operator	Darrah Oil Company, LLC
Well Name	PORSCH UNIT 1-3
Doc ID	1467683

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Type and Percent Additives
Surface	12.25	8.625	23	330	Class A	Gel 2% 4% CC

JUN 0 5 2013



Remit To: Hurricane Services, Inc. 250 N. Water, Suite 200 Wichita, KS 67202 316-303-9515

HURRICANE SERVICES INC

Customer:

DARRAH OIL C/O JOHN JAY DARRAH JR PO BOX 2786 WICHITA, KS 67201-2786

Invoice Date: 4/26/2019 Invoice #: 0341506 Lease Name: Porsch unit Well#: 1-3 (New) County: Sheridan Job Number: ICT1967

	W. W. W. 1, T. W. () / W.	W. C. 7	
Date/Description	HRS/QTY	Rate	Total
Surface	0.000	0.000	0.00
Cement pump #231	1.000	637.500	637.50
Heavy Eq Mileage	40.000	3.400	136.00
Light Eq Mileage	40.000	1.700	68.00
Light Eq Mileage	396.000	1.275	504.90
H-325	200.000	17.000	3,400.00

82300/800 CEMENT

Total _ 4,746.40

TERMS: Net 30 days. Interest may be charged on past due invoice at rate of 1 1/2% per month or maximum allowed by applicable state or federal laws. HSI has right to revoke any discounts applied in arriving at net invoice price if invoice is past due. If revoked, full invoice price without discount plus additional sales tax, as applicable, is due immediately and subject to interest charges. Customer agrees to pay all collection costs directly or indirectly incurred by HSI in the event HSI engages a third party to pursue collection of past due invoice. SALES TAX: Services performed on oil, gas and water wells in Kansas are subject to sales tax, with certain exceptions. HSI relies on the well information provided by the customer in identifying whether the services performed on wells qualify for exemption.



HURRICANE SERVICES INC

Customer	Darrah	Lease & Well # Porach unit 1-3							Date	4	/28/2019
Service District	Hoxle, KS		County &	State She	State Sheridan, KS Legnis Sitt		3-79-29W		Job (I		MANAGE STORY AND A PARTY OF THE
Job Type	Surface	PROD ■ PROD	a IM	n s	VD	New Viell?	W YES	¤ No	Ticketo	1	CT1967
Equipment#	Driver				Job Safe	ly Analysis - A Discus	sion of Hazards	& Safety Pro	cedures	d	
73	Miles Shaw	■ Hard hat		B G	oves		□ Lockout/Tage	ut	₩ Warning Signs	& Flagging	
231	Paul Williams	H2S Monitor		B €	e Protecti	on	Required Pen	nits	□ Fall Protection		
181/254	John Polley	Safety Footwes	ar	n R	spiratory	Protection	Slip/Trip/Fall	lazards	P Specific Job Ser	quence/Expe	ctations
		₩ FRC/Protective	Clothing	n A	iditional C	hemical/Acid PPE	■ Overhead Ha	ards	Muster Point/N		1
		d Hearing Protec	tion	n Pi	re Extingui	sher	a Additional co	ncems or issu	es noted below		
					***************************************	Cor	nments				
		All product and e	equip from Oa	ldey yard	•		***************************************				-
Product/ Service Code											
G010	Cement Pump		in the same			Unit of Deasure		1			Net Amount
M010		**1	***************************************			ea	1.00				\$637.50
M015	Heavy Equipment N					ml	40.00				\$136,00
M020	Light Equipment Mi	icale				ml	40,00	 			\$68,00
CP015	Ton Mileage H-325	***************************************		***************************************		fm	395,00				\$604,90
21 7 1 2	Irvav	MARGAMANA		***************************************	***************************************	sack	200,00				\$3,400.00
											
				***************************************	····	_					
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			an Tallet Silver	9 11.4							
					4, 8.1	al Germini			71	***************************************	
Custo	omer Section: On th	io following scale (tirs associal yea	rrate Hum	ane Sers	renemic 7				Net:	\$4,746.40
				P	····		Total Taxable	\$ -	Tax Rate:		
Ba	sed on this job, ho	w likely is it you w	would recom	mend HSI	lo a collea	igue?	State tax laws dec	m certain prod	ucts and services rexempt. Hurricane	Sale Tax;	\$
							Services relies on	the customer p	rovided well		
Ų	Havey 1 2	3 4 5	6 7	8 9	10	Extractly Utually	Information above services and/or pr	to make a dete oducts ere tax :	imination if exempt.	Yotal:	\$ 4,746,40
				LOTTE LA TOPO DE LA TOPO DELLA TOPO DE LA TOPO DELLA T	***************************************	***************************************	uerb		244. 21		3 3,140,40
							HSI Represe	rteuve:	Miles Shaw		

TERMS: Cash in advance unless Hurricane Services inc. (HSI) has approved credit prior to sale. Credit terms of sale for approved accounts an total invoice due on or before the 30th day from the date of invoice. Past due accounts shall pay interect on the balance past due at the rate of 1 ½% per month or the maximum allowable by applicable state or federal lews, in the event it is necessary to employ an agency and/or attorney to affect the collection. Customer hereby agrees to pay all fees directly inclinedly incurred for such collection, in the event that Customer's account with HSI becomes delinquiont, HSI has the right to revoke any discounts previously applied in arriving at not invoice, price, under a restricted and are astimated only and are good for 30 days from the date of issue. Pricing does not include fedoral, state, or local taxes, or royalties and stated price adjustments. Actual charges may vary depending upon time, equipment, and material utilinately required to perform these services. Any discounts is based on 30 days and payment terms or cash. DISCLAIMER HOTICE: Technical data is exhibited by the contrary is stated or implied. HSI assumes no liability for advice or recommendations made concerning the results from the use of any product or service. The information precented is a best estimate of the actual results that may be achieved and should be used for comparison purposes and HSI makes no quarantee of future production performance. Customer guarantees proper operational care of all customer owned equipment and property while HSI is on location performing services. The authorization below acknowledges the receipt and acceptance of ell terms/conditions stated above, and Hurricane has been provided securate well information in determining taxable services.

x Khl Wh	CUSTOMER AUTHORIZATION SIGNATURE
----------	----------------------------------



CEMEN			_	ORT	A STATE OF THE								
Gus	itomer	Darrah	Oil			Well:	Porsch 1-3			Ticket		ICT1967	
City,	State	Selden,	KS		C (ounty:		Sheridan, KS			Date	: 4	/26/2019
Fie	ld Rep	Rick Wilson S-T-R		S-T-R:	***************************************	3-7S-29W		Service		Cement			
Day	enhala	Informati							1				
	e Size:		12.25"			Slurr				- 200		ement Blenc	
	Depth:		333'			eight: r/5x:		#/sx gal/sx		Class	Product	%	#
	g Size:		8.625			Yield:		ft ³ /sx		Gel	*		18800 376
Casing	Depth:		330'			/Ft.:	***************************************	***************************************		CaCI			564
Tubing	Liner		ln		D	lepthi		ft		Metso	***************************************		
	Depth:		ft		Vo	lume:		bbls		KolSea	ıl		***************************************
Tool / P		ļ			Ex	cessi	120%	%		Pheno:	Seal		
	Depth		ft		Total S	-	50	bbls		Salt			
Oispince	ement:	<u> </u>	19.75		Total \$	neks:	200	63K					
TIME	RATE	PSI	BBLs		REMARKS		THE DAILY	0.0	0.01			Total	19,740
10pm					Arrivial		TIME	RATE	PSI	BBLs		REMAR	KS
1005pm				\$i	ifety meeting		***************************************					***************************************	
1010pm				***************************************	lig up equip								
1115pm					un in casing								***************************************
1230am				Cir	culate casing		······································						
1240am	6.0	200.0	69.8	Pump co	ement and displace				***************************************			***************************************	
1am	5.0	200.0			Shut in								***************************************
115am				Wash up	Wash up and rig down equip		***************************************						
145am				***************************************	depart				***************************************				
***************************************		***************************************					***************************************	-	······································	-			
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		CREW			UNIT						SUMMAR	<b>(</b>	
Сеп	nenter:		Miles Sha	aw T		73.0		Average	Rate	Avera			uid
Pump Op		F	aul Willia	ms	2	31.0			pm	200.00	psi	69,75	
	ulk#1:		John Poll	ey	1	181.0							
Bı	ulk #2:												



Darrah Oil Company LLC

125 N. Market

Wichita, KS 67202 ATTN: Seth Evenson

**Suite 1425** 

Porsch Unit #1-3

3-7S.-29W.

Job Ticket: 63290

82

DST#: 1

Test Start: 2019.04.29 @ 08:52:00

Unit No:

GENERAL INFORMATION:

Formation: Stotler

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

Time Tool Opened: 11:10:30 Time Test Ended: 15:37:00

Interval: 3525.00 ft (KB) To 3885.00 ft (KB) (TVD)

Total Depth: 3585.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good Tester: Martine Salinas

Reference Elevations: 2747.00 ft (KB)

2742.00 ft (CF)

Sheridan, KS

KB to GR/CF: 5.00 ft

Serial #: 8959 Inside

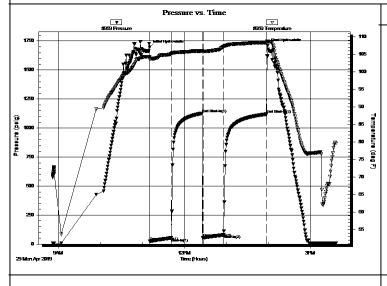
Press@RunDepth: 3526.00 ft (KB) Capacity: 79.71 psig @ 8000.00 psig

Start Date: 2019.04.29 End Date: 2019.04.29 Last Calib.: 2019.04.29 Start Time: 08:52:01 End Time: 15:37:00 Time On Btm: 2019.04.29 @ 11:10:20 2019.04.29 @ 13:59:00 Time Off Btm:

TEST COMMENT: 30-IF-S.blow built to 6 1/4"

45-ISI-No blow back 30-FF-S.blow built to 4 3/4"

60-FSI-No blow



Time	Pressure	Temp	Annotation
(Min.)	(psig)	(deg F)	
0	1696.16	104.22	Initial Hydro-static
1	23.18	103.54	Open To Flow (1)
31	53.16	105.09	Shut-In(1)
76	1127.08	105.92	End Shut-In(1)
77	55.05	105.77	Open To Flow (2)
106	79.71	107.13	Shut-In(2)
168	1120.01	108.35	End Shut-In(2)
169	1708.81	108.70	Final Hydro-static

PRESSURE SUMMARY

# Recovery

Length (ft)	Description	Volume (bbl)
130.00	HMCW 39%M, 61%W	1.82
0.00	Oil spots in tool	0.00

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

Trilobite Testing, Inc. Ref. No: 63290 Printed: 2019.04.29 @ 16:06:48



Darrah Oil Company LLC

Porsch Unit #1-3

3-7S.-29W.

125 N. Market Suite 1425 Wichita, KS 67202

Job Ticket: 63290

ATTN: Seth Evenson

Test Start: 2019.04.29 @ 08:52:00

# GENERAL INFORMATION:

Formation: Stotler

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:10:30 Time Test Ended: 15:37:00

Interval: 3525.00 ft (KB) To 3885.00 ft (KB) (TVD)

Total Depth: 3585.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Initial)

Martine Salinas

Sheridan, KS

DST#: 1

Unit No: 82

Tester:

Reference Elevations: 2747.00 ft (KB)

2747.00 ft (KB) 2742.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8734 Outside

 Press@RunDepth:
 psig
 @
 3526.00 ft (KB)
 Capacity:
 8000.00 psig

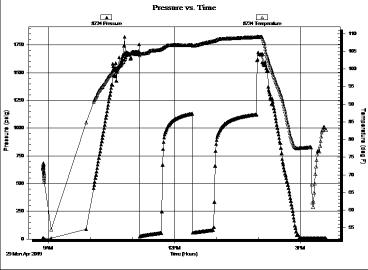
Start Date: 2019.04.29 End Date: 2019.04.29 Last Calib.: 2019.04.29

Start Time: 08:52:01 End Time: 15:37:00 Time On Btm: Time Off Btm:

TEST COMMENT: 30-IF-S.blow built to 6 1/4"

45-ISI-No blow back 30-FF-S.blow built to 4 3/4"

60-FSI-No blow



Р	RESSU	JRE	SUM	MARY

	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
7				
pered				
Temperature (deg F)				
eg P)				

#### Recovery

Length (ft)	Description	Volume (bbl)
130.00	HMCW 39%M, 61%W	1.82
0.00	Oil spots in tool	0.00
	•	

#### Gas Rates

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

Trilobite Testing, Inc Ref. No: 63290 Printed: 2019.04.29 @ 16:06:48



**FLUID SUMMARY** 

Darrah Oil Company LLC

3-7S.-29W. Sheridan,KS

125 N. Market Suite 1425

Job Ticket: 63290

Porsch Unit #1-3

DST#: 1

Wichita, KS 67202 ATTN: Seth Evenson

Test Start: 2019.04.29 @ 08:52:00

**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: 28000 ppm

Viscosity: 67.00 sec/qt Cushion Volume: bbl

Water Loss: 7.60 in³ Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 900.00 ppm Filter Cake: 1.00 inches

### **Recovery Information**

#### Recovery Table

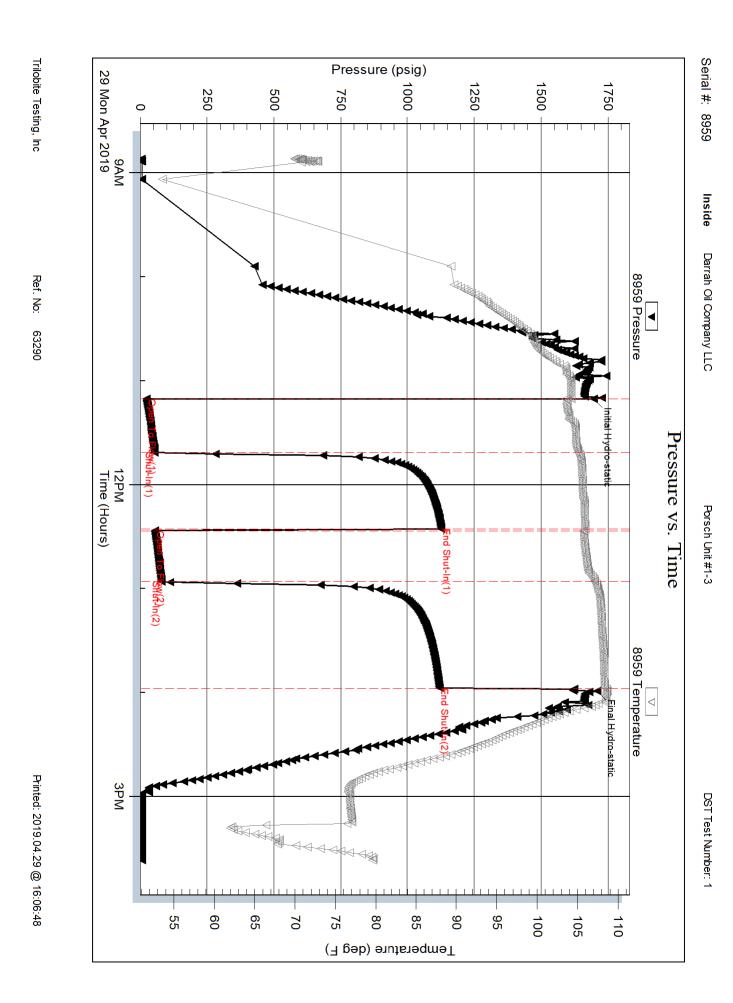
Length ft	Description	Volume bbl
130.00	HMCW 39%M, 61%W	1.824
0.00	Oil spots in tool	0.000

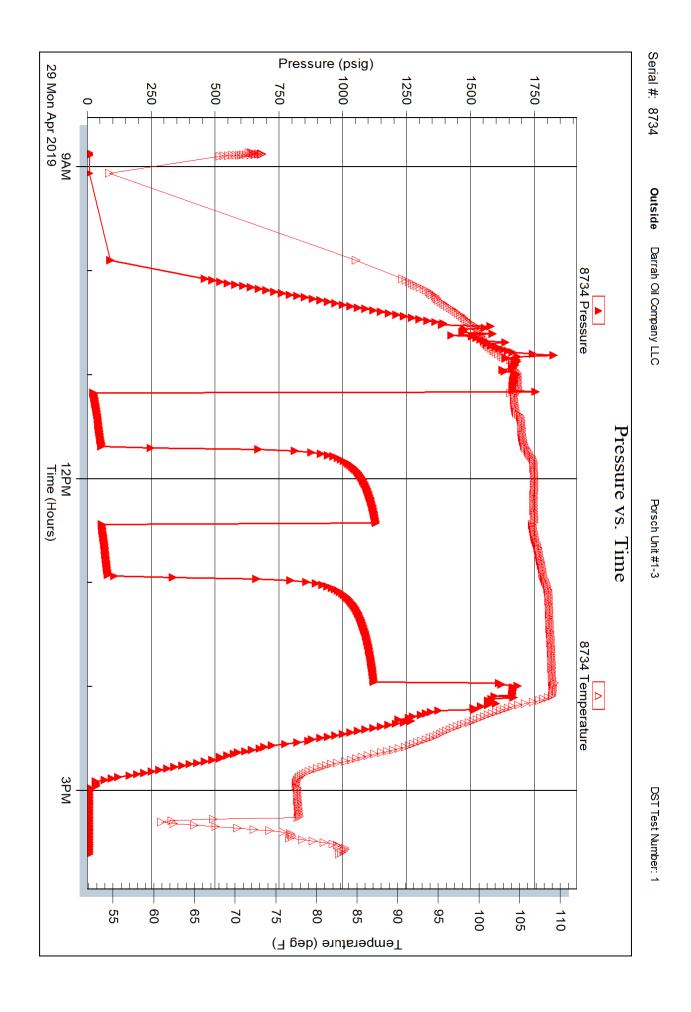
Total Length: 130.00 ft Total Volume: 1.824 bbl

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

Laboratory Name: Laboratory Location:
Recovery Comments: RW= .235 @ 78 degs = 28,0000 PPM

Trilobite Testing, Inc Ref. No: 63290 Printed: 2019.04.29 @ 16:06:48





Trilobite Testing, Inc

Ref. No:

63290

Printed: 2019.04.29 @ 16:06:48



Darrah Oil Company LLC

Porsch Unit #1-3

125 N. Market **Suite 1425** 

Job Ticket: 63291

Tester:

Unit No:

3-7S.-29W.

DST#: 2

2747.00 ft (KB)

2742.00 ft (CF)

Sheridan, KS

Wichita, KS 67202 ATTN: Seth Evenson

Test Start: 2019.04.30 @ 07:10:00

Martine Salinas

82

#### **GENERAL INFORMATION:**

Formation: "Deer Creek"

Deviated: Whipstock: Test Type: Conventional Bottom Hole (Reset) ft (KB)

Time Tool Opened: 08:53:00 Time Test Ended: 13:39:30

Interval:

3668.00 ft (KB) To 3700.00 ft (KB) (TVD) Reference Elevations:

Total Depth: 3700.00 ft (KB) (TVD)

7.88 inches Hole Condition: Good Hole Diameter: KB to GR/CF:

5.00 ft

Serial #: 8959 Inside

Press@RunDepth: 173.23 psig @ 3669.00 ft (KB) Capacity: 8000.00 psig

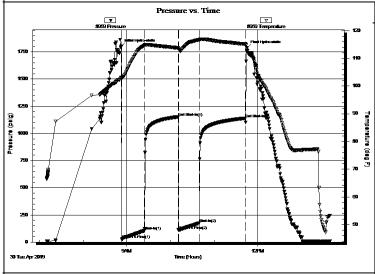
Start Date: 2019.04.30 End Date: Last Calib.: 2019.04.30 2019.04.30 Start Time: 07:10:01 End Time: 13:39:30 Time On Btm: 2019.04.30 @ 08:52:40 Time Off Btm: 2019.04.30 @ 11:45:30

TEST COMMENT: 30-IF-S.blow built to B.O.B (11 inches) @ 17 mins (blow increased to 17 3/4")

45-ISI-Weak surface blow back @ 7 mins dead @ 26 mins

30-FF-S.blow built to B.O.B (11 inches) @ 23 mins (blow increased to 14 3/4")

60-FSI-S.blow back @ 26 mins built to 1/4" dead @ 45 mins



(Min.)	(psig)	(deg F)	
0	1801.52	103.16	Initial Hydro-static
1	24.71	102.80	Open To Flow (1)
32	103.35	114.59	Shut-In(1)
78	1152.49	113.74	End Shut-In(1)
79	111.33	113.38	Open To Flow (2)
107	173.23	116.63	Shut-In(2)
171	1137.91	115.14	End Shut-In(2)
173	1787.90	112.32	Final Hydro-static

PRESSURE SUMMARY

Annotation

Temp

Pressure

#### Recovery

Length (ft)	Description	Volume (bbl)	
189.00	MSW 4%M, 96%W	2.65	
146.00	146.00 HMCW 38%M, 62%W		
* Recovery from multiple tests			

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

Trilobite Testing, Inc. Ref. No: 63291 Printed: 2019.04.30 @ 13:54:07



Darrah Oil Company LLC

Porsch Unit #1-3

125 N. Market **Suite 1425** 

3-7S.-29W.

Job Ticket: 63291 DST#: 2

Wichita, KS 67202 ATTN: Seth Evenson

Test Start: 2019.04.30 @ 07:10:00

### GENERAL INFORMATION:

"Deer Creek" Formation:

Deviated: Whipstock: Test Type: Conventional Bottom Hole (Reset) ft (KB)

Time Tool Opened: 08:53:00

Tester: Martine Salinas

Unit No: 82

Sheridan, KS

Time Test Ended: 13:39:30

2747.00 ft (KB)

Interval: 3668.00 ft (KB) To 3700.00 ft (KB) (TVD) Total Depth: 3700.00 ft (KB) (TVD)

Reference Elevations:

2742.00 ft (CF)

Hole Diameter:

KB to GR/CF: 5.00 ft

7.88 inches Hole Condition: Good

Serial #: 8734

Outside

psig @ 3669.00 ft (KB)

Capacity: Last Calib.: 8000.00 psig

Press@RunDepth: Start Date:

2019.04.30

End Date: 2019.04.30

Time On Btm:

2019.04.30

Start Time:

07:10:01

End Time:

13:39:40

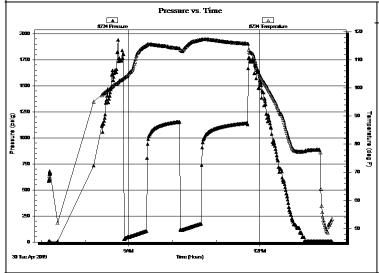
Time Off Btm:

TEST COMMENT: 30-IF-S.blow built to B.O.B (11 inches) @ 17 mins (blow increased to 17 3/4")

45-ISI-Weak surface blow back @ 7 mins dead @ 26 mins

30-FF-S.blow built to B.O.B (11 inches) @ 23 mins (blow increased to 14 3/4")

60-FSI-S.blow back @ 26 mins built to 1/4" dead @ 45 mins



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

#### Recovery

Length (ft)	Description	Volume (bbl)		
189.00	MSW 4%M, 96%W	2.65		
146.00	HMCW 38%M, 62%W	2.05		
* Recovery from multiple tests				

#### Gas Rates

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

Trilobite Testing, Inc. Ref. No: 63291 Printed: 2019.04.30 @ 13:54:07



**FLUID SUMMARY** 

Darrah Oil Company LLC

3-7S.-29W. Sheridan,KS

Porsch Unit #1-3

125 N. Market Suite 1425 Wichita, KS 67202 ATTN: Seth Evenson

Job Ticket: 63291 **DST#: 2** 

Test Start: 2019.04.30 @ 07:10:00

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

Mud Type:Gel ChemCushion Type:Oil API:deg APIMud Weight:9.00 lb/galCushion Length:ftWater Salinity:70000 ppm

Viscosity: 55.00 sec/qt Cushion Volume: bbl

Water Loss: 7.40 in³ Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 1500.00 ppm Filter Cake: 1.00 inches

### **Recovery Information**

# Recovery Table

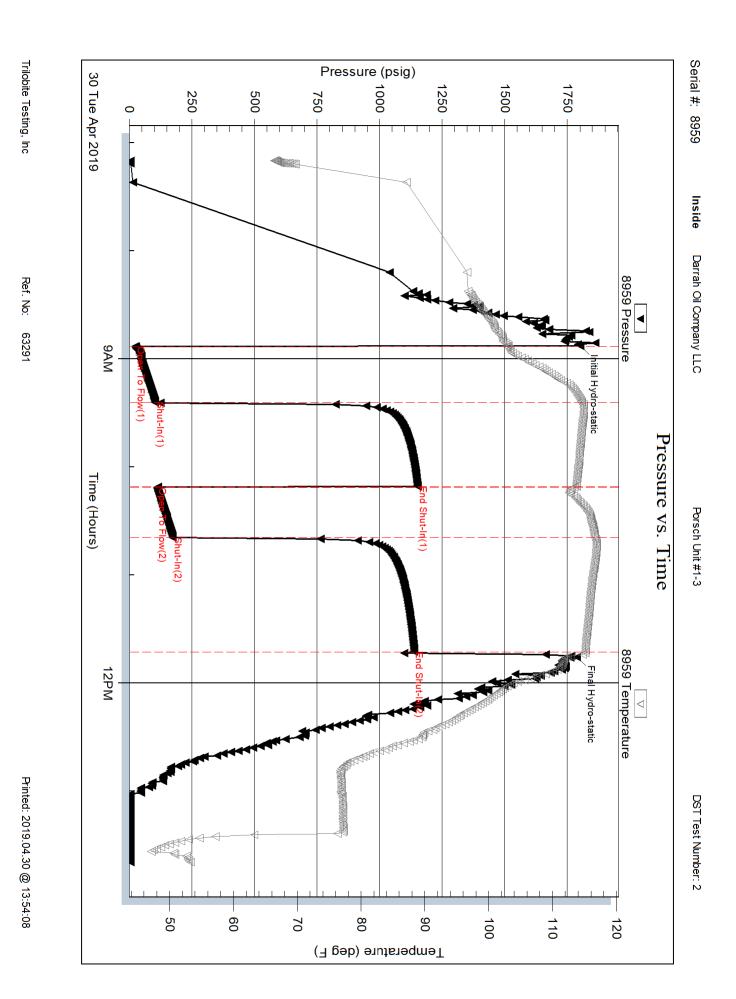
Length ft	Description	Volume bbl
189.00	MSW 4%M, 96%W	2.651
146.00	HMCW 38%M, 62%W	2.048

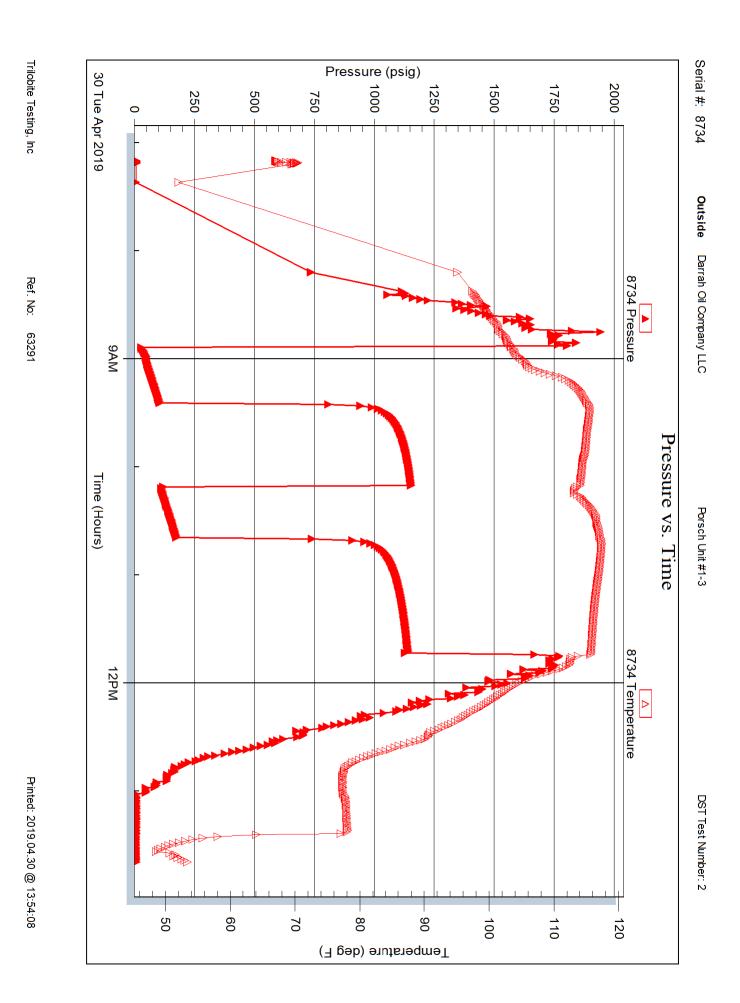
Total Length: 335.00 ft Total Volume: 4.699 bbl

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

Laboratory Name: Laboratory Location:
Recovery Comments: RW= .174 @ 46.5 degs = 70,000 PPM

Trilobite Testing, Inc Ref. No: 63291 Printed: 2019.04.30 @ 13:54:08







Darrah Oil Company LLC

125 N. Market Porsch Unit #1-3

Suite 1425 Wichita, KS 67202 ATTN: Seth Evenson

Job Ticket: 63292 **DST#: 3** 

Test Start: 2019.05.01 @ 00:30:00

# GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB) Test Typ

Time Tool Opened: 02:24:40 Time Test Ended: 06:50:00

Interval: 3764.00 ft (KB) To 3775.00 ft (KB) (TVD)

Total Depth: 3775.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Reset)
Tester: Martine Salinas

Sheridan, KS

Unit No: 82

3-7S.-29W.

Reference Elevations: 2747.00 ft (KB)

2742.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8734 Outside

Press@RunDepth: 127.98 psig @ 3765.00 ft (KB) Capacity: 8000.00 psig

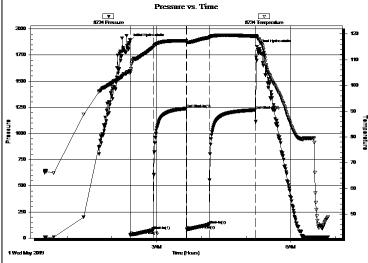
 Start Date:
 2019.05.01
 End Date:
 2019.05.01
 Last Calib.:
 2019.05.01

 Start Time:
 00:30:01
 End Time:
 06:50:00
 Time On Btm:
 2019.05.01 @ 02:24:30

 Time Off Btm:
 2019.05.01 @ 05:14:50

TEST COMMENT: 30-IF-S.blow built to B.O.B (11 inches) @ 30 mins

45-ISI-No blow back 30-FF-S.blow built to 9 1/4" 60-FSI-No blow back



	PRESSURE SUMMARY			
	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
	0	1887.89	105.61	Initial Hydro-static
	1	28.73	104.67	Open To Flow (1)
	31	77.48	114.78	Shut-In(1)
	76	1238.85	117.27	End Shut-In(1)
	76	82.84	116.61	Open To Flow (2)
	106	127.98	118.56	Shut-In(2)
3	168	1225.11	119.13	End Shut-In(2)
	171	1829.70	118.86	Final Hydro-static

#### Recovery

Length (ft)	Description	Volume (bbl)
225.00	MCW 12%M, 88%W	3.16
* Recovery from mult	tiple tests	

Gas Rates			
	Choke (inches)	Pressure (nsig)	Gas Rate (Mcf/d)

Trilobite Testing, Inc Ref. No: 63292 Printed: 2019.05.01 @ 07:15:01



Darrah Oil Company LLC

125 N. Market

Wichita, KS 67202 ATTN: Seth Evenson

**Suite 1425** 

Porsch Unit #1-3

3-7S.-29W.

Job Ticket: 63292 DST#: 3

Test Start: 2019.05.01 @ 00:30:00

GENERAL INFORMATION:

Formation:

Deviated: Whipstock: No ft (KB)

Time Tool Opened: 02:24:40 Time Test Ended: 06:50:00

Interval: 3764.00 ft (KB) To 3775.00 ft (KB) (TVD)

Total Depth: 3775.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good Test Type: Conventional Bottom Hole (Reset)

Sheridan, KS

Tester: Martine Salinas

Unit No: 82

2747.00 ft (KB)

Reference Elevations:

2742.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8959 Inside

Press@RunDepth: 3765.00 ft (KB) psig @

Start Date: 2019.05.01 End Date:

Start Time: 00:30:01 End Time: Capacity: Last Calib.:

8000.00 psig 2019.05.01

Time On Btm:

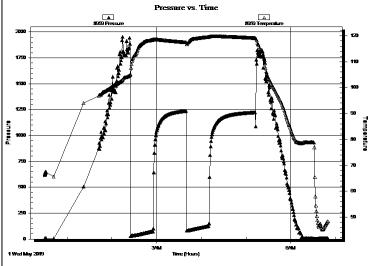
Time Off Btm:

2019.05.01

06:49:50

TEST COMMENT: 30-IF-S.blow built to B.O.B (11 inches) @ 30 mins

45-ISI-No blow back 30-FF-S.blow built to 9 1/4" 60-FSI-No blow back



PRESSURE SUN	<b>MARY</b>
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	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
Temperature				
2				

#### Recovery

Length (ft)	Description	Volume (bbl)			
225.00	MCW 12%M, 88%W	3.16			
* Recovery from mul	* Recovery from multiple tests				

#### Gas Rates

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

Trilobite Testing, Inc. Ref. No: 63292 Printed: 2019.05.01 @ 07:15:01



**FLUID SUMMARY** 

Darrah Oil Company LLC

3-7S.-29W.

Sheridan, KS

125 N. Market **Suite 1425** 

Porsch Unit #1-3 Job Ticket: 63292

DST#: 3

Wichita, KS 67202 ATTN: Seth Evenson

Test Start: 2019.05.01 @ 00:30:00

**Mud and Cushion Information** 

Mud Type: Gel Chem Mud Weight:

Oil API:

deg API

Resistivity:

9.00 lb/gal 65.00 sec/qt

Cushion Type: Cushion Length: Cushion Volume:

Water Salinity:

58000 ppm

Viscosity: Water Loss:

7.40 in³ ohm.m Gas Cushion Type:

Gas Cushion Pressure:

psig

ft

bbl

Salinity: 1500.00 ppm Filter Cake: 1.00 inches

### **Recovery Information**

#### Recovery Table

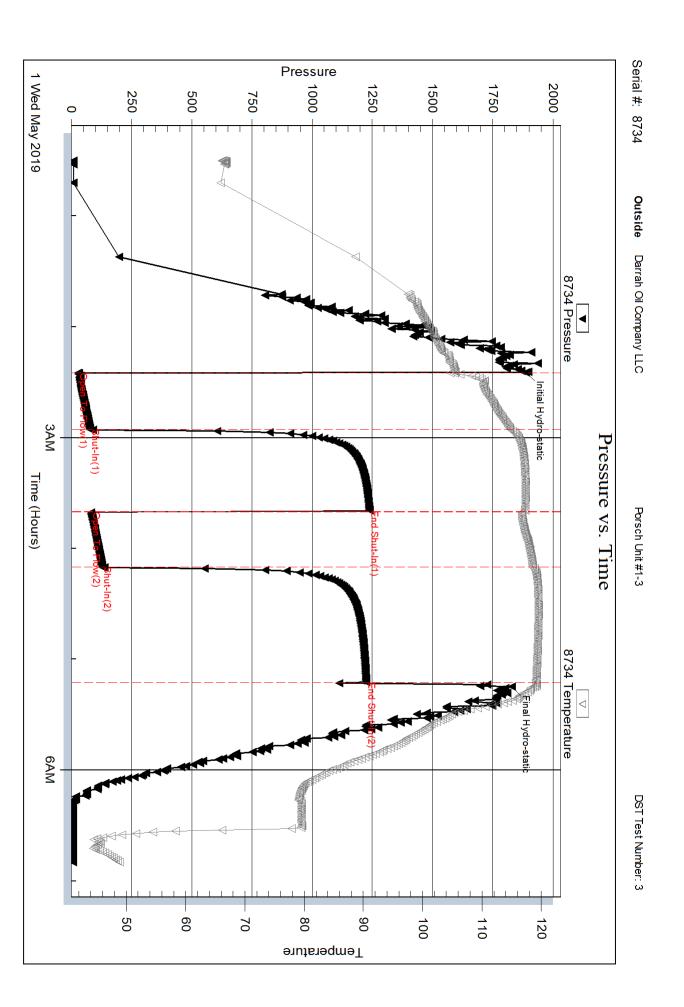
Length ft	Description	Volume bbl
225.00	MCW 12%M, 88%W	3.156

Total Length: 225.00 ft Total Volume: 3.156 bbl

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

Laboratory Name: Laboratory Location: Recovery Comments: RW= .223 @ 43.5 degs = 58,000 PPM

Trilobite Testing, Inc Ref. No: 63292 Printed: 2019.05.01 @ 07:15:01

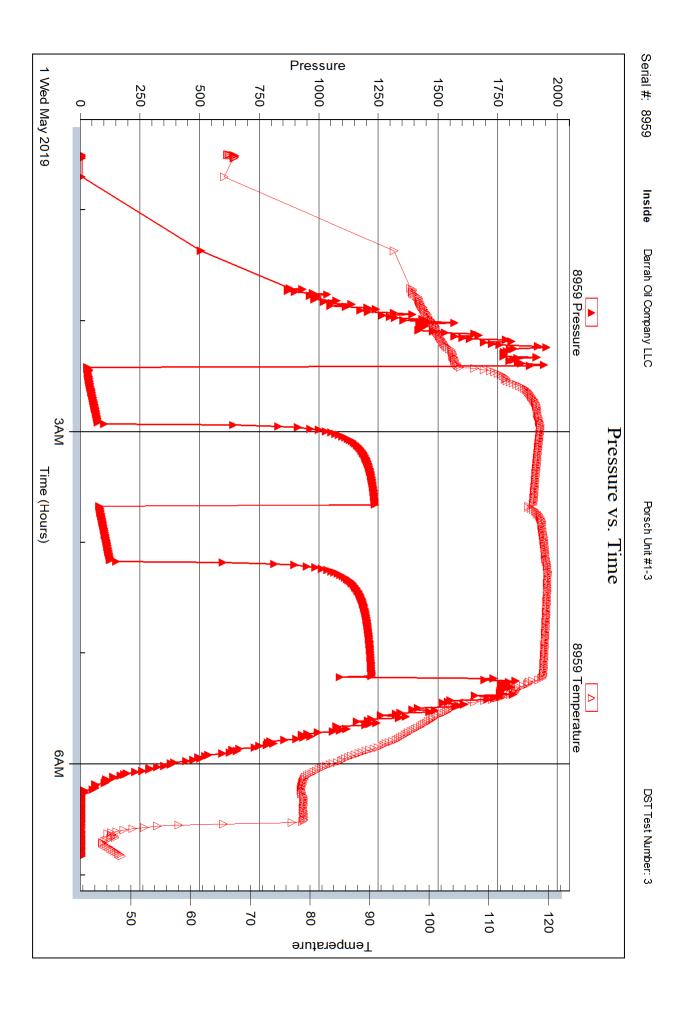


Trilobite Testing, Inc

Ref. No:

63292

Printed: 2019.05.01 @ 07:15:01



Trilobite Testing, Inc

Ref. No: 63292

Printed: 2019.05.01 @ 07:15:01