

Confidentiality Requested:

Yes No

Kansas Corporation Commission Oil & Gas Conservation Division

1284555

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 #			API No. 15						
Name:			Spot Description:						
Address 1:			SecTwpS. R East _ West						
Address 2:			Feet from North / South Line of Section						
City: St	ate: Zip	D:+	Feet	from East / West Line of Section					
Contact Person:			Footages Calculated from Ne	earest Outside Section Corner:					
Phone: ()			□ NE □ NW	☐ SE ☐ SW					
CONTRACTOR: License #			GPS Location: Lat:	, Long:					
Name:				g. xx.xxxxx) (e.gxxx.xxxxx)					
Wellsite Geologist:			Datum: NAD27 NAD27						
Purchaser:			County:						
Designate Type of Completion:			Lease Name:	Well #:					
New Well Re-	·Fntrv	Workover	Field Name:						
	_		Producing Formation:						
☐ Oil ☐ WSW	SWD	SIOW	Elevation: Ground: Kelly Bushing:						
☐ Gas ☐ D&A ☐ OG	☐ ENHR	☐ SIGW ☐ Temp. Abd.	Total Vertical Depth:	Plug Back Total Depth:					
CM (Coal Bed Methane)	G3W	iemp. Abd.	Amount of Surface Pipe Set and Cemented at: Feet						
Cathodic Other (Core	Expl etc.)		Multiple Stage Cementing Collar Used? Yes No						
If Workover/Re-entry: Old Well Inf			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:			loot doparto.						
	_	NHR Conv. to SWD							
Deepening Re-perf. Plug Back	Conv. to GS		Drilling Fluid Management F (Data must be collected from the						
Commingled	Permit #:		Chloride content:	ppm Fluid volume: bbl					
Dual Completion	Permit #:		Dewatering method used:						
SWD	Permit #:		Location of fluid disposal if ha	auled offsite:					
☐ ENHR	Permit #:		On a water Name of						
GSW	Permit #:		Operator Name: License #:						
Spud Date or Date Rea	iched TD	Completion Date or		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									
Geologist Report Received									
UIC Distribution									
ALT I II III Approved by: Date:									

Page Two



Operator Name:			Lease Name: _			Well #:		
Sec Twp	S. R	East West	County:					
open and closed, flow and flow rates if gas t	ving and shut-in presson to surface test, along w	formations penetrated. I ures, whether shut-in pro vith final chart(s). Attach	essure reached stati n extra sheet if more	c level, hydrosta space is neede	itic pressures, bott d.	tom hole tempe	erature, fluid r	recovery,
		otain Geophysical Data a or newer AND an image		egs must be ema	ailed to kcc-well-lo	gs@kcc.ks.gov	n. Digital elec	tronic log
Drill Stem Tests Taken (Attach Additional	•	Yes No	og Formation (Top), Depth and Datum Sample					
Samples Sent to Geo	ological Survey	☐ Yes ☐ No	Nam	e		Тор	Datur	m
Cores Taken Electric Log Run		☐ Yes ☐ No ☐ Yes ☐ No						
List All E. Logs Run:								
		CASING	RECORD Ne	ew Used				
		Report all strings set-	conductor, surface, inte	ermediate, product	ion, 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 P Additiv	
		ADDITIONAL	OFMENTING / OOL					
Purpose:	Depth		CEMENTING / SQL	JEEZE RECORD		araant Additiraa		
Perforate	Top Bottom	Type of Cement	# Sacks Used		Type and F	ercent Additives		
Protect Casing Plug Back TD								
Plug Off Zone								
Did vou perform a hydra	ulic fracturing treatment o	on this well?		Yes	No (If No, ski	p questions 2 ar	nd 3)	
	=	raulic fracturing treatment ex	xceed 350,000 gallons		= ' '	p question 3)	,	
Was the hydraulic fractu	ring treatment information	n submitted to the chemical	disclosure registry?	Yes	No (If No, fill	out Page Three	of the ACO-1)	
Shots Per Foot		ON RECORD - Bridge Plug Footage of Each Interval Per			cture, Shot, Cement			Depth
	Сроспу Г	octago of Laon morvari of	ioratou	(>1	mount and rand or ma	teriar Good)		Борит
TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run:	Yes No			
Date of First, Resumed	Production, SWD or EN							
Fotimeted Day 1 2	0" -	Flowing			Other (Explain)) O" D "		
Estimated Production Per 24 Hours	Oil E	Bbls. Gas	Mcf Wate	er B	bls. G	Gas-Oil Ratio	Gr 	ravity
DISPOSITI	ON OF GAS:	1	METHOD OF COMPLE	ETION:		PRODUCTIO	ON INTERVAL:	
Vented Sold		Open Hole	Perf. Dually	Comp. Con	mmingled			
	bmit ACO-18.)	Other (Specify)	(Submit)	ACO-5) (Sub	omit ACO-4)			

Form	ACO1 - Well Completion
Operator	Zinszer Oil Co., Inc.
Well Name	Amrein 3
Doc ID	1284555

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set			Type Of Cement		Type and Percent Additives
Surface	12.25	8.625	23	1420	SMDC	450	.25# FS
Production	7.875	5.5	17	3430	EA/2	125	0



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



Invoice

DATE	INVOICE#
11/5/2015	28869

BILL TO

Zinszer Oil Co. Inc.

PO Box 211

Hays, KS 67601-0211

- Acidizing

Jernent

Tool Rental

10520-0

1180

TERMS	Well N	lo.	Lease	County	Contractor	We	II Type	W	ell Category	Job Purpose	e Operat	tor
Net 30	#3		Amrein	Rooks	Discovery Drilling		Oil		evelopment	Cement LongSt	ri Blaine	e
PRICE	PRICE REF. DESCRIPTION							′	UM	UNIT PRICE	AMOUNT	
575D 578D-L 402-5 403-5 406-5 407-5 325 284 283 286 276 281 221 290 581D 583D		Pum 5 1/5 1/5 1/5 1/5 1/5 1/5 Star Cals Salt Hala Floo Muc Liqu D-A Serv Dray	: ad-1 (Halad 9) cele d Flush uid KCL (Clayfix	et Plug & Baffle hoe With Auto	Fill		3	8 900	1 ''	5.00 1,250.00 60.00 250.00 225.00 300.00 12.25 30.00 0.20 8.00 2.25 1.25 25.00 42.00 1.50 0.75	200. 1,250. 360.007 250.007 225.007 300.007 2,143.757 240.007 180.007 800.007 625.007 50.007 84.007 262. 274.	00 T T T T T T T T T T T T T
We A	ppre	cia	ate Your	Busines	s!		<u> </u>		Tota		\$7 733	47

\$7,733.47



CHARGE TO:	7	
ADDRESS	LINSTOR ()il	
CITY, STATE, ZIP	CODE	

TICKET 28869

Services, Inc.	CITY, STATE, ZIF	CODE					PAGE 1	OF Z
SERVICE LOCATIONS (LS WELL/PROJECT NO. 1.	£3 LEASI	Ampoin	COUNTY/PARISH	STATE KS	CITY ZUN	-ch	DATE OF 15	WNER
□ SERVICE □ SALES	TRACTOR	DISCOUR	RIG NAME/NO.		DELIVERED TO		ORDER NO.	
4. WELL TYPE INVOICE INSTRUCTION	We We	recopment JOB PU	coment long string	γ	WELL PERMIT NO	·	WELL LOCATION 33 - 8	-19
PRICE SECONDARY REFERENCE/ FERENCE PART NUMBER	ACCOUNTING LOC ACCT	DF	DESCRIPTION		QTY. U	M QTY.	UNIT UM PRICE	AMOUNT
575	t	MILEAGE	TEX 110		-40 1	١ .	5 00	200 00
578	1	Pung Charge			1/10		125000	125000
40.2		Contralizer				~ (o)		36000
406			aluat bolifle		5½ W		28 225 08	25000
407	1	1	She of Autor	² (LL	32 ia			30000
LEGAL TERMS: Customer hereby acknowledges the terms and conditions on the reverse side hereof but are not limited to, PAYMENT, RELEASE, INI	f which include,	REMIT PAY	MENT TO:	SUR' OUR EQUIPMENT WITHOUT BREAK! WE UNDERSTOOE MET YOUR NEEDS	PERFORMED OWN? OAND	AGREE UN- DECIDED	DIS- AGREE PAGE TOTAL	2585 240500 477255
LIMITED WARRANTY provisions. MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR	К ТО	SWIFT SERV	VICES, INC.	OUR SERVICE WA	S HOUT DELAY?		5 ubtotal	1
START OF WORK OR DELIVERY OF GOODS		P.O. BC		WE OPERATED THAND PERFORMED CALCULATIONS	IE EQUIPMENT JOB		Rooks TAX 0	375 192
X DATE SIGNED TIME SIGNED	AM. P.M.	NESS CITY, 785-798		SATISFACTORILY: ARE YOU SATISFIE CUST	D WITH OUR SER	VICE? NO	TOTAL	7733 47
CUSTOMER SWIFT OPERATOR		MATERIALS AND SERVICES	The customer hereby acknow	wledges receipt of th	e materials and s	ervices listed on this	ticket.	Thank You!

TICKET CONTINUATION

e.	583	185					-				Stello	72	(22)	185	276	38 %	283	284	325	PRICE	Seamine	リジャ
																				SECONDARY REFERENCE/ PART NUMBER	O Ne	
									-				-					-		ACCOUNTING TIME	Off: 785-798-2300	PO Box 466
	MILEAGE TOTAL WEIGHT CHARGE	SERVICE CHARGE									₹ 7	The Capie	100 0x 10	Middlich	Horale	halad-1	solt	Ca/Sal	Stanford count	DESCRIPTION	CUSTOMER / WSZEK	
	LOADED MILES	175										***************************************	- :						of (factor)	PTION	8 O.T	
	TON MILES 366-7	CUBIC FEET						-			4901	2001	12	029 020				8 8 8	175 36	QTY U/M Q	WELL AMPRIL #3	
CONTINUA			_	 -		 			_	-					8	160 16	90016	91.00		QTY U/M		 -
CONTINUATION TOTAL	0 75	1/50	-	 				 			- 707	\$ C	8	F 28	22	8	Ø Ø	8	12 25	UNIT	STOU IS	No. 28869
4772.55	274 80	262 50	 -		 			 		 -	0 1 0	92.8	275 00	12500	00 M1	8000	00 1081	240 00	248 25	AMOUNT	2 to 2	9

JOB LO)G	0 -	WELL NO.		SWIFT	A	ces, Inc.	DATE 5 NOV 15 PAGEN
	insur	071		43	1 2	Amre	in comunit long	String TICKET NO. 28869
CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T C	PRESSUR TUBING	CASING		ERATION AND MATERIALS
			<u> </u>				1755k 84-2 2	general of & flocale
							30 = 3430 Shoe	53 = 17 = casing
							30 0 3430 shoe	j+27.54'
							Candralizar 1, 3, 5,	7.97,11 Boshed 8
	0700						- 1 7-01	N.
	0730				<u> </u>		on loc tox	2.42
	0120				<u> </u>		Start 52x174	Casing in well
	8930		<u> </u>				Drop bell - c	No. 1+
	-					_	Clop ball C	remare
	1000	3	12			700	Panp 500 gal mul	#Push
		3	20			280	Pung 20 bb1 KCl	Lles
								1.
•			7				Phy RH-MH	305 - 705
								-h
	1017	34	34			700	Mix St-Z cent	- 125 @ 15.3 pog
		·						7 0.0
							Drop Atch ose	in plus
							Drop Atch ose wash out purp	5 line
	. 40							
	1039	<u> </u>	10			200	Displace Dig	,
		6	68			450		
		6	75			750		
	1,000	6	79			1500	hand plug	
			<u> </u>					
							Kellase firessine It	fruk-dniebyp
							(0)	•
					<u> </u>		wash druck	
							D. L	
							Pack up	
	1140						1 sh countate	
	·						Job complete	
							TheoBlarne	
		<u> </u>					Plana	Flicters
							JKW/N/	/ MUT PAR
							7.00	



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



Invoice

DATE	INVOICE#
10/30/2015	28865

BILL TO

Zinszer Oil Co. Inc.

PO Box 211

Hays, KS 67601-0211

Acidizing

Cement

• Tool Rental

TERMS	Well N	o. Lease	County	Contractor	We	Il Type	W	ell Category	Job Purpose	Operator
Net 30	#3	Amrein	Rooks	Discovery Drilling		Oil	D	evelopment	Cement Deep St	u Blaine
PRICE	REF.		DESCRIP	TION		QT	′	UM	UNIT PRICE	AMOUNT
575D 576D-D 330 276 290 281 221 410-8 412-8 409-8 581D 583D		Mileage - 1 Way Pump Charge - Dee Swift Multi-Density Flocele D-Air Mud Flush Liquid KCL (Clayfi 8 5/8" Top Plug 8 5/8" Baffle Plate 8 5/8" Turbolizer Service Charge Cen Drayage Subtotal Sales Tax Rooks Co	Standard (MII x)			1,1	1 450 125 3 500 2 1 1	Gallon(s) Each Each Each Sacks	5.00 1,250.00 15.75 2.25 42.00 1.25 25.00 120.00 110.00 95.00 1.50 0.75	250.00 1,250.00 7,087.50T 281.25T 126.00T 625.00T 50.00T 110.00T 95.00T 675.00 839.63
We A	ppre	ciate Your	Busines	s!				Tota	1	\$12 104 01

\$12,104.01



CHARGE TO:	Zinszer O	1
ADDRESS	B.111-20-5 01	
CITY, STATE, ZI	PCODE	

TICKET 28865

							<u> </u>							
Services		CITY, ST	ATE, ZIP CC	DDE							PAGE	1	OF L	
SERVICE LOCATIONS 1. Grand	WELL/PROJECT NO.	43	LEASE	1 m. Rosin	COUNTY/PARISH R80 KS	STATE	ZUN	<u>, 1</u>		- 1	ATE	OWN	IER	
2.	TICKET TYPE CONTR	ACTOR	<u> </u>	LIMITATIVE	RIG NAME/NO.	SHIPPED	DELIVERED T				30 OCT (5 RDER NO.			
3.	SERVICE SALES		True	Discovery	4	VIACT	10		21		-			
A	WELL TYPE		WELL CA	١. حل ١.	ment deep SM	Lana	WELL PERMIT	NO.		l W	ELL LOCATION 33-8-	IG		
REFERRAL LOCATION	INVOICE INSTRUCTION	S	1 000	OUT WELL	Many Cast SVV	yee	L		· · · · · ·		00 5-	47_		
	IDARY REFERENCE/	ACCOU			DESCRIPTION		QTY.	1104	QTY.		UNIT		AMOUNT	
575	ANT NO. DEL	1	OI DF	MILEAGE	TRX 114		50	l u/M	QIT.	U/M		20	250	00
576D		+		Pump Charge	[RE 119		1	m. ee			1250			20
330		1		SWD Com	ant:		450	Isk				75		150
276				Florelo.	ONL)		125				<u> </u>	25		2
290		1		D-AZR			1 7	Gal				00	126	
281		1		MUNEJUSH			500	7				25	625	
821		1		KCL linered	}		2	nd			25		50	00
410		,		TOD DIVE		· · · · · · · · · · · · · · · · · · ·	88	in	1	09		00		8
412		1		Ballo Plate			BE		t a	00		છ	110	00
409		1		TUPBOLIZER			83			09	95 k	50	95	100
		(service ch	ige		450	Sk			/ 6	50	675	00
•		١		Drayage			44 780	15	1119.5		0	15	839	63
LEGAL TERMS: Customer the terms and conditions on t		•		REMIT PAY	MENT TO:	OUR EQUIPMENT		AGRE	E DECIDED	DIS- AGRE	PAGE TOTA	ıL	11,509	38
but are not limited to, PAYN			· 1			WE UNDERSTOO	D AND	- 		-		_	<u></u>	<u> </u>
LIMITED WARRANTY prov				SWIFT SERV	VICES INC	MET YOUR NEED OUR SERVICE W	AS	+	<u> </u>	<u> </u>	┥ .	ı		į
MUST BE SIGNED BY CUSTOMER OR START OF WORD OR DELIVERY OF G	CUSTOMER'S AGENT PRIOR T DODS	0		P.O. BC	•	PERFORMED WIT WE OPERATED T AND PERFORMED CALCULATIONS		+	 		Rooks		- 0.1	
, ALL				NESS CITY,		SATISFACTORILY	?				7.0%	0	594	63
DATE SIGNED	TIME SIGNED		AM.			ARE YOU SATISF	ED WITH OUR YES		□ NO				. 1	
	1	2130	r.M.	785-798	D-∠3UU	□ cus	TOMER DID NO	T WISH TO	RESPOND		TOTAL		12,104	101
. '	CUSTOMER A		ICE OF MA	TERIALS AND SERVICES	The customer hereby acknow	vledges receipt of the	ne materials ar	id service	s listed on th	is ticket.				

SWIFT OPERATOR

APPROVAL

Thank You!



Prepared For: Zinszer Oil Co., Inc.

PO Box 211 Hays, KS 67601

ATTN: Marc Downing

Amrein #3

33-8S-19W Ellis, KS

Start Date: 2015.11.02 @ 07:15:54 End Date: 2015.11.02 @ 14:45:24 Job Ticket #: 64833 DST#: 1

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



Zinszer Oil Co., Inc.

33-8S-19W Ellis,KS

PO Box 211 Hays, KS 67601

Job Ticket: 64833

Amrein #3

DST#: 1

ATTN: Marc Downing

Test Start: 2015.11.02 @ 07:15:54

GENERAL INFORMATION:

Time Tool Opened: 10:00:24

Time Test Ended: 14:45:24

Formation:

Plattsmouth

Deviated:

No Whipstock: ft (KB)

Test Type:

Conventional Bottom Hole (Initial)

Tester:

Brannan Lonsdale

Unit No:

62

3106.00 ft (KB) To 3130.00 ft (KB) (TVD)

Reference Bevations:

2003.00 ft (KB)

Interval: Total Depth:

3130.00 ft (KB) (TVD)

1995.00 ft (CF)

Hole Diameter:

7.88 inches Hole Condition: Fair

KB to GR/CF:

8.00 ft

Serial #: 6651 Press@RunDepth: Inside

127.35 psig @

3127.00 ft (KB)

Capacity:

8000.00 psig

Start Date:

2015.11.02

End Date:

2015.11.02

Last Calib .:

2015.11.02

Start Time:

07:15:55

End Time:

14:45:24

Time On Btm:

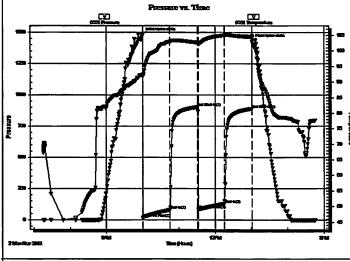
2015.11.02 @ 09:59:54

Time Off Btm:

2015.11.02 @ 13:01:54

TEST COMMENT: 45- IF- BOB 20 mins

45- ISI- No blow 45- FF- BOB 30 mins 45- FSI- No blow



	PRESSURE SUMMARY								
]	Time	Pressure	Temp	Annotation					
	(Min.)	(psig)	(deg F)						
	0	1482.39	92.29	Initial Hydro-static					
	1	14.31	91.84	Open To Flow (1)					
	45	79.39	102.93	Shut-In(1)					
	91	903.00	102.69	End Shut-In(1)					
3	92	82.50	102.15	Open To Flow (2)					
Temperatura Temperatura	135	127.35	105.02	Shut-In(2)					
5	181	889.70	104.49	End Shut-In(2)					
1	182	1430.71	104.50	Final Hydro-static					

Recovery

Length (ft)	Description	Volume (bbl)			
186.00	MW, 10%M 90%W	2.34			
124.00	ω	1.76			

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

Trilobite Testing, Inc

Ref. No: 64833



Zinszer Oil Co., Inc.

33-8S-19W Ellis, KS

PO Box 211 Hays, KS 67601

Job Ticket: 64833

Amrein #3

DST#: 1

ATTN: Marc Downing

Test Start: 2015.11.02 @ 07:15:54

GENERAL INFORMATION:

Formation:

Plattsmouth

Deviated:

No Whipstock: ft (KB)

Test Type: Conventional Bottom Hole (Initial) Tester: Brannan Lonsdale

Time Tool Opened: 10:00:24

Time Test Ended: 14:45:24

Unit No:

2003.00 ft (KB)

Interval: Total Depth: 3106.00 ft (KB) To 3130.00 ft (KB) (TVD) 3130.00 ft (KB) (TVD)

Reference Bevations: 1995.00 ft (CF)

Hole Diameter:

7.88 inches Hole Condition: Fair

KB to GR/CF:

8.00 ft

Serial #: 6839 Press@RunDepth: Outside

psig @

3127.00 ft (KB)

Capacity:

8000.00 psig

Start Date:

2015.11.02

End Date:

2015.11.02

Last Calib.: Time On Btm: 2015.11.02

Start Time:

07:16:17

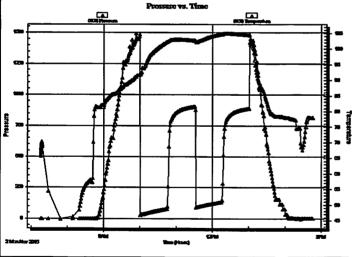
End Time:

14:45:46

Time Off Btm:

TEST COMMENT: 45- iF- BOB 20 mins

45- ISI- No blow 45- FF- BOB 30 mins 45- FSI- No blow



		PRESSURE SUMMARY							
Ī	Time	Pressure	Temp	Annotation					
	(Min.)	(psig)	(deg F)						
Terresian									
•									

DDECCLIDE CLIMANADY

Recovery Length (ft) Description Volume (bbl) 186.00 MW, 10%M 90%W 2.34 124.00 1.76

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

Trilobite Testing, Inc.

Ref. No: 64833



TOOL DIAGRAM

Zinszer Oil Co., Inc.

33-8S-19W Ellis, KS

PO Box 211 Hays, KS 67601

Amrein #3

Job Ticket: 64833

DST#: 1

ATTN: Marc Downing

Test Start: 2015.11.02 @ 07:15:54

Tool Information

Drill Collar:

Drill Pipe: Heavy Wt. Pipe: Length:

Length: 3062.00 ft Diameter: Length:

ft Diameter: 32.00 ft Diameter:

3.82 inches Volume: inches Volume: 2.25 inches Volume:

43.41 bbl - bbl 0.16 bbl

Tool Weight:

2000.00 lb Weight set on Packer: 25000.00 lb

Weight to Pull Loose: 52000.00 lb Tool Chased

Drill Pipe Above KB: Depth to Top Packer:

8.00 ft 3106.00 ft

ft

Total Volume: - bbl

String Weight: Initial 42000.00 lb

0.00 ft

Depth to Bottom Packer: Interval between Packers:

24.00 ft

44.00 ft

Final 45000.00 lb

Number of Packers:

2 Diameter: 6.75 inches

Tool Comments:

Tool Length:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3087.00		
Shut in Tool	5.00			3092.00		
Hydraulic tool	5.00			3097.00		
Packer	5.00			3102.00	20.00	Bottom Of Top Packer
Packer	4.00			3106.00		
Stubb	1.00			3107.00		
Perforations	20.00			3127.00		
Recorder	0.00	6651	Inside	3127.00		
Recorder	0.00	6839	Outside	3127.00		
Bullnose	3.00			3130.00	24.00	Bottom Packers & Anchor

Total Tool Length:

44.00

Trilobite Testing, Inc

Ref. No: 64833



FLUID SUMMARY

Zinszer Oil Co., Inc.

33-8S-19W Ellis, KS

PO Box 211 Hays, KS 67601 Amrein #3

Job Ticket: 64833

DST#: 1

ATTN: Marc Downing

Test Start: 2015.11.02 @ 07:15:54

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

33 deg API

Mud Weight:

9.00 lb/gal

Oushion Length: Oushion Volume: ft bbl Water Salinity: 100000 ppm

Viscosity: Water Loss: 38.00 sec/qt 10.18 in³

Gas Cushion Type:

psig

Resistivity:

ohm.m

Gas Cushion Pressure:

Salinity: 1500.00 ppm Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
186.00	MW, 10%M 90%W	2.340
124.00	co	1.758

Total Length:

310.00 ft

Total Volume:

4.098 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

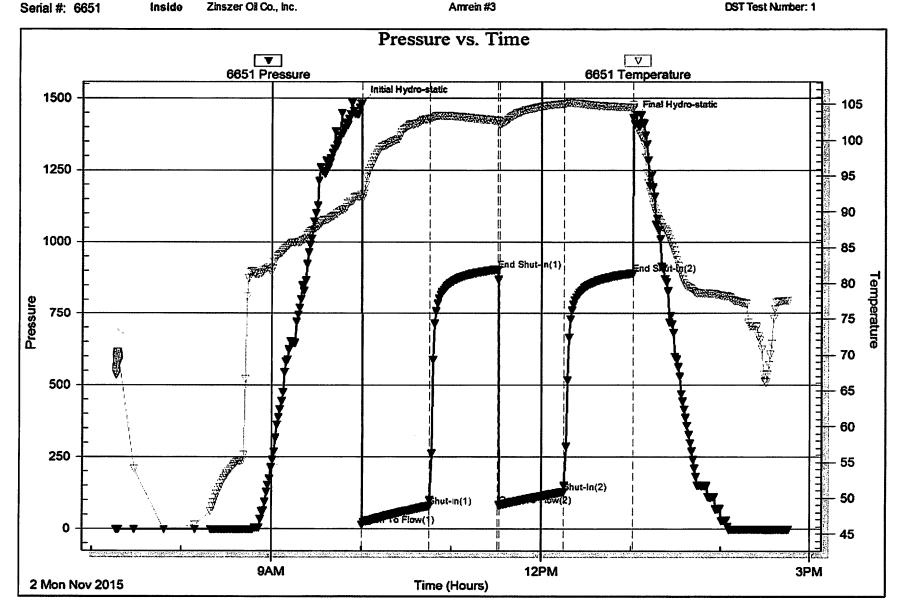
Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc

Ref. No: 64833

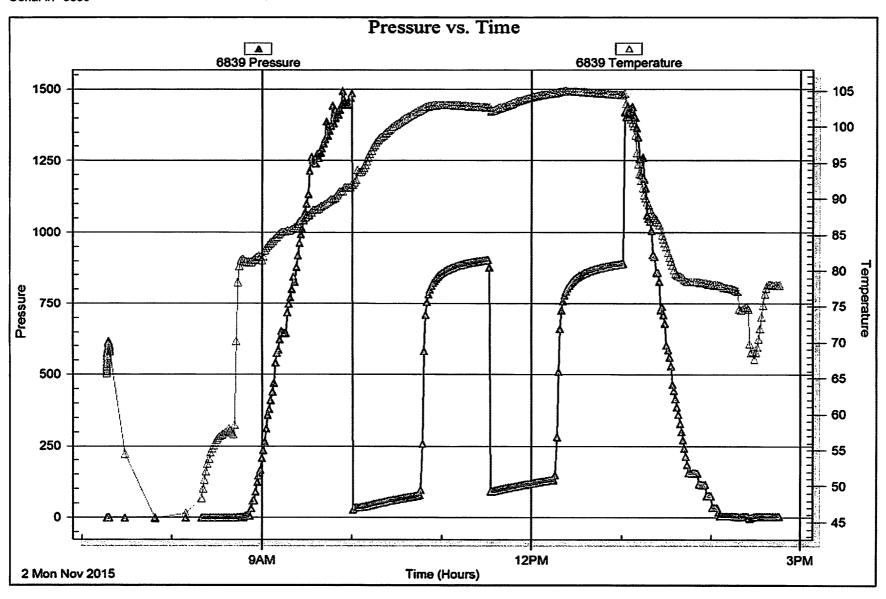
Inside Zinszer Oil Co., Inc. Amrein #3 **DST Test Number: 1**



Serial #: 6839 Outside Zinszer Oil Co., Inc.

Amrein #3

DST Test Number: 1



Tribbite Testing, Inc.

Ref. No: 64833



Prepared For: Zinszer Oil Co., Inc.

PO Box 211 Hays, KS 67601

ATTN: Marc Downing

Amrein #3

33-8S-19W Ellis,KS

Start Date: 2015.11.02 @ 23:51:26 End Date: 2015.11.03 @ 06:18:26

Job Ticket #: 64834 DST#: 2

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

33-8S-19W Ellis,KS



Zinszer Oil Co., Inc.

33-8S-19W Ellis, KS

PO Box 211 Hays, KS 67601 Amrein #3

Job Ticket: 64834

DST#: 2

ATTN: Marc Downing

ft (KB)

Test Start: 2015.11.02 @ 23:51:26

GENERAL INFORMATION:

Formation:

LKC "A - B"

Deviated:

No Whipstock:

Test Type:

Conventional Bottom Hole (Reset)

Tester:

Brannan Lonsdale

Unit No:

Reference Bevations:

2003.00 ft (KB)

KB to GR/CF:

1995.00 ft (CF)

Interval: Total Depth:

Time Tool Opened: 01:36:26

Time Test Ended: 06:18:26

3178.00 ft (KB) To 3216.00 ft (KB) (TVD)

3216.00 ft (KB) (TVD)

Hole Diameter:

Press@RunDepth:

7.88 inches Hole Condition: Fair

8.00 ft

Serial #: 6651

Inside

107.72 psig @

3213.00 ft (KB)

2015.11.03

Capacity: Last Calib .: 8000.00 psig

Start Date: Start Time:

2015.11.02 23:51:27

End Date: End Time:

06:18:26

Time On Btm:

2015.11.03 2015.11.03 @ 01:35:56

Time Off Btm:

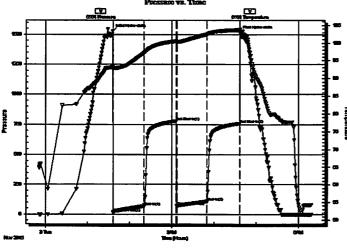
2015.11.03 @ 04:36:56

TEST COMMENT: 45- IF- Surface blow built slow ly to 9 1/2"

45- ISI- .1/2" blow

45- FF- 1" blow built slowly to BOB 42 mins

45- FSI- Surface blow



	PRESSURE SUMMARY								
.]	Time	Pressure	Temp	Annotation					
	(Min.)	(psig)	(deg F)						
'	0	1527.66	93.21	Initial Hydro-static					
i	1	14.31	92.65	Open To Flow (1)					
1	45	68.66	97.22	Shut-In(1)					
	90	776.96	100.54	End Shut-in(1)					
펿	91	71.75	100.31	Open To Flow (2)					
Temperatur	134	107.72	102.44	Shut-In(2)					
3	181	758.40	103.68	End Shut-In(2)					
	181	1514.81	103.90	Final Hydro-static					
i									
·									
.									

Recovery

Length (ft)	Description	Volume (bbl)
206.00	MW, 30%M 70%W	2.62
20.00	∞	0.28
0.00	210' GIP	0.00
Recovery from r	nultiple tests	· · · · · · ·

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

Trilobite Testing, Inc

Ref. No: 64834



Zinszer Oil Co., Inc.

33-8S-19W Ellis, KS

PO Box 211 Hays, KS 67601

Job Ticket: 64834

Amrein #3

DST#: 2

ATTN: Marc Downing

Test Start: 2015.11.02 @ 23:51:26

GENERAL INFORMATION:

Time Tool Opened: 01:36:26

Time Test Ended: 06:18:26

Formation:

LKC "A - B"

Deviated:

Interval:

Total Depth:

No Whipstock:

ft (KB)

Test Type:

Conventional Bottom Hole (Reset)

Tester:

Brannan Lonsdale

Unit No:

Reference Bevations:

2003.00 ft (KB)

1995.00 ft (CF)

KB to GR/CF:

8.00 ft

Hole Diameter: Serial #: 6839

Press@RunDepth:

Outside

3216.00 ft (KB) (TVD)

3178.00 ft (KB) To 3216.00 ft (KB) (TVD)

7.88 inches Hole Condition: Fair

psig @ 3213.00 ft (KB)

2015.11.03

Capacity:

8000.00 psig

Start Date:

2015.11.02

End Date:

Last Calib.: Time On Btm: 2015.11.03

Start Time:

23:51:05

End Time:

06:18:04

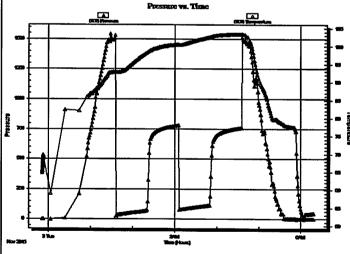
Time Off Btm:

TEST COMMENT: 45- IF- Surface blow built slowly to 9 1/2"

45- ISF .1/2" blow

45- FF- 1" blow built slowly to BOB 42 mins

45- FSI- Surface blow



	PRESSURE SUMMARY						
	Time	Pressure	Temp	Annotation			
	(Min.)	(psig)	(deg F)				
7							
5							

Recovery

Length (ft)	Description	Volume (bbl)
206.00	MW, 30%M 70%W	2.62
20.00	∞	0.28
0.00	210' GIP	0.00

Gas Rates

Choke (inches) Pressure (psig)

Gas Rate (Mcf/d)

Trilobite Testing, Inc.

Ref. No: 64834



TOOL DIAGRAM

Zinszer Oil Co., Inc.

33-8S-19W Ellis, KS

PO Box 211 Hays, KS 67601 Amrein #3

Job Ticket: 64834

DST#: 2

ATTN: Marc Downing

Test Start: 2015.11.02 @ 23:51:26

Tool Information

Drill Pipe:

Length: 3156.00 ft Diameter:

ft Diameter:

3.82 inches Volume: inches Volume: 44.74 bbl - bbl

Tool Weight:

2000.00 lb

Drill Collar:

Heavy Wt. Pipe: Length:

Length: 32.00 ft Diameter:

2.25 inches Volume: Total Volume: 0.16 bbl - bbl

Weight set on Packer: 25000.00 lb Weight to Pull Loose: 46000.00 lb

Tool Chased

0.00 ft

Drill Pipe Above KB: Depth to Top Packer:

30.00 ft 3178.00 ft

String Weight: Initial 42000.00 lb

Depth to Bottom Packer: Interval between Packers:

38.00 ft 58.00 ft

Final 44000.00 lb

Tool Length:

Number of Packers:

2 Diameter: 6.75 inches

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3159.00		
Shut In Tool	5.00			3164.00		
Hydraulic tool	5.00			3169.00		
Packer	5.00			3174.00	20.00	Bottom Of Top Packer
Packer	4.00			3178.00		
Stubb	1.00			3179.00		
Perforations	2.00			3181.00		
Change Over Sub	1.00			3182.00		
Drill Pipe	30.00			3212.00		
Change Over Sub	1.00			3213.00		
Recorder	0.00	6651	Inside	3213.00		
Recorder	0.00	6839	Outside	3213.00		
Bullnose	3.00			3216.00	38.00	Bottom Packers & Anchor
Total Tool Langth					•	

Total Tool Length:

58.00



FLUID SUMMARY

Zinszer Oil Co., Inc.

33-8S-19W Ellis, KS

PO Box 211 Hays, KS 67601

Amrein #3

Job Ticket: 64834

DST#: 2

ATTN: Marc Downing

Test Start: 2015.11.02 @ 23:51:26

Mud and Cushion Information

Mud Type: Gel Chem

9.00 lb/gal

Cushion Type:

Oil API:

37 deg API

Mud Weight: Viscosity:

51.00 sec/qt

Cushion Length: Cushion Volume: ft bbl Water Salinity: 92000 ppm

Water Loss:

8.78 in³

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
206.00	MW, 30%M 70%W	2.624
20.00	CO	0.284
0.00	210' GIP	0.000

Total Length:

226.00 ft

Total Volume:

2.908 bbl

Num Fluid Samples: 0

Num Gas Bombs:

Serial #:

Laboratory Name:

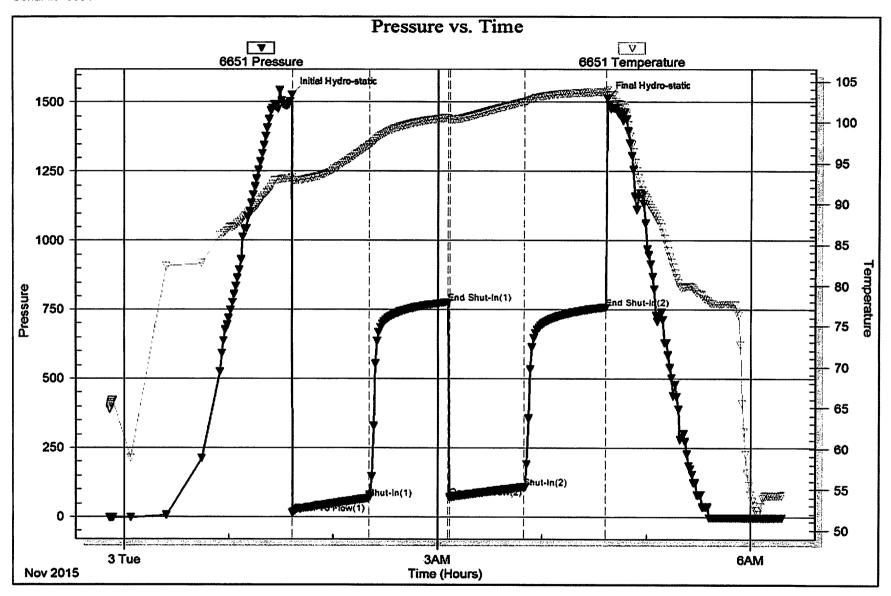
Laboratory Location:

Recovery Comments:

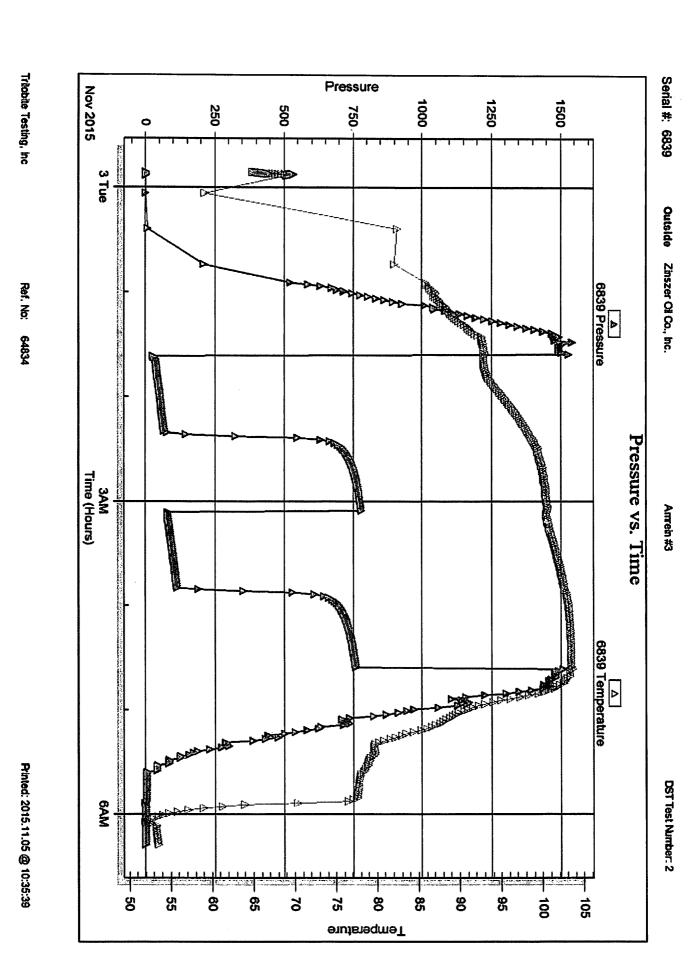
Trilobite Testing, Inc

Ref. No: 64834

Serial #: 6651 Inside Zinszer Oil Co., Inc. Amrein #3 DST Test Number: 2



Tritobile Testing, Inc Ref. No: 64834 Printed: 2015.11.05 @ 10:35:39





Prepared For: Zinszer Oil Co., Inc.

PO Box 211 Hays, KS 67601

ATTN: Marc Downing

Amrein #3

33-8S-19W Ellis,KS

Start Date: 2015.11.03 @ 11:59:53 End Date: 2015.11.03 @ 18:38:53 Job Ticket #: 64835 DST #: 3

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



Zinszer Oil Co., Inc.

33-8S-19W Ellis, KS

PO Box 211 Hays, KS 67601

Job Ticket: 64835

Amrein #3

DST#:3

ATTN: Marc Downing

Test Start: 2015.11.03 @ 11:59:53

GENERAL INFORMATION:

Time Tool Opened: 13:48:53

Time Test Ended: 18:38:53

Formation:

LKC "C"

No

Deviated:

Whipstock:

ft (KB)

Test Type:

Conventional Bottom Hole (Reset)

Tester:

Brannan Lonsdale

Unit No:

2003.00 ft (KB)

Reference Bevations:

1995.00 ft (CF)

KB to GR/CF:

8.00 ft

Interval: Total Depth:

Hole Diameter:

3212.00 ft (KB) To 3236.00 ft (KB) (TVD)

3236.00 ft (KB) (TVD)

7.88 inches Hole Condition: Fair

Serial #: 6651 Press@RunDepth: inside

400.79 psig @

3233.00 ft (KB)

2015.11.03

Capacity:

8000.00 psig

Start Date: Start Time: 2015.11.03 11:59:54

End Date: End Time:

18:38:53

Last Calib.: Time On Btm:

2015.11.03 2015.11.03 @ 13:48:23

Time Off Btm:

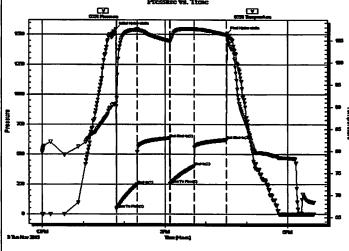
2015.11.03 @ 16:31:23

TEST COMMENT: 30- IF- BOB 3 mins

45- ISI- Surface blow built slowly to 2 1/4"

38- FF- BOB 5 mins

48- FSI- Surface blow built slowly to 2 1/4"



	PRESSURE SUMMARY				
Į	Time	Pressure	Temp	Annotation	
	(Mn.)	(psig)	(deg F)		
	0	1546.37	90.74	Initial Hydro-static	
	1	43.45	90.20	Open To Flow (1)	
ì	31	246.15	107.49	Shut-In(1)	
1	79	635.88	104.93	End Shut-In(1)	
7	79	251.82	104.72	Open To Flow (2)	
andszepre	115	400.79	107.59	Shut-In(2)	
5	162	620.90	106.33	End Shut-In(2)	
	163	1509.49	105.95	Final Hydro-static	

Recovery Description Length (ft) Volume (bbl) 620.00 SMW, 5%M 95%W 8.49 186.00 SGOCMW, 10%G 20%O 40%W 30%M 2.64 47.00 ∞ 0.67 0.00 326' GIP 0.00 Recovery from multiple tests

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

Trilobite Testing, Inc

Ref. No: 64835



Zinszer Oil Co., Inc.

33-8S-19W Ellis,KS

PO Box 211 Hays, KS 67601 Amrein #3

Job Ticket: 64835

DST#:3

ATTN: Marc Downing

Test Start: 2015.11.03 @ 11:59:53

Brannan Lonsdale

GENERAL INFORMATION:

Time Tool Opened: 13:48:53

Time Test Ended: 18:38:53

Formation:

LKC "C"

Deviated:

No Whipstock: ft (KB)

Test Type:

Conventional Bottom Hole (Reset)

Tester:

Unit No:

Reference Bevations:

2003.00 ft (KB)

1995.00 ft (CF)

KB to GR/CF:

8.00 ft

Interval: Total Depth:

Hole Diameter:

3212.00 ft (KB) To 3236.00 ft (KB) (TVD)

3236.00 ft (KB) (TVD)

7.88 inches Hole Condition: Fair

Serial #: 6839 Press@RunDepth: Outside

psig @

3233.00 ft (KB)

Last Calib.:

Capacity:

8000.00 psig

Start Date:

2015.11.03

End Date:

2015.11.03

Time On Btm:

2015.11.03

Start Time:

11:59:43

End Time:

18:38:42

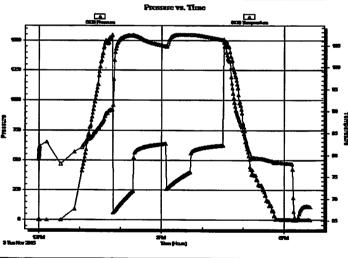
Time Off Btm:

TEST COMMENT: 30- IF- BOB 3 mins

45- ISI- Surface blow built slowly to 2 1/4"

38- FF- BOB 5 mins

48- FSI- Surface blow built slowly to 2 1/4"



PRESSURE SUMMARY

	Time	Pressure	Temp	Annotation
85	(Min.)	(psig)	(deg F)	
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Temperetura B 2				
5		i I		
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1		i I		
5				
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ı		1		

Recovery

Length (ft)	Description	Volume (bbl)
620.00	SMW, 5%M 95%W	8.49
186.00	SGOCMW, 10%G 20%O 40%W 30%M	2.64
47.00	co c	0.67
0.00	326' GIP	0.00
* Recovery from n	nuttiple tests	

Gas Rates

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

Trilobite Testing, Inc

Ref. No: 64835



Total Volume:

TOOL DIAGRAM

Zinszer Oil Co., Inc.

33-8S-19W Ellis, KS

PO Box 211 Hays, KS 67601 Amrein #3 Job Ticket: 64835

DST#: 3

ATTN: Marc Downing

Test Start: 2015.11.03 @ 11:59:53

String Weight: Initial 43000.00 lb

Printed: 2015.11.05 @ 10:35:18

Tool Information

Drill Pipe Above KB:

Depth to Top Packer:

Drill Pipe: Heavy Wt. Pipe: Length:

Drill Collar:

Length:

Length: 3187.00 ft Diameter: 32.00 ft Diameter:

ft Diameter:

3.82 inches Volume: inches Volume: 2.25 inches Volume:

45.18 bbl

- bbl 0.16 bbl - bbl

Tool Weight: Weight set on Packer: 25000.00 lb Weight to Pull Loose: 58000.00 lb

Tool Chased

2000.00 lb

Final 48000.00 ib

0.00 ft

27.00 ft 3212.00 ft Depth to Bottom Packer:

24.00 ft

ft

Interval between Packers: Tool Length:

44.00 ft 2 Diameter:

6.75 inches

Tool Comments:

Number of Packers:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3193.00		
Shut in Tool	5.00			3198.00		
Hydraulic tool	5.00			3203.00		
Packer	5.00			3208.00	20.00	Bottom Of Top Packer
Packer	4.00			3212.00		
Stubb	1.00			3213.00		
Perforations	20.00			3233.00		
Recorder	0.00	6651	Inside	3233.00		
Recorder	0.00	6839	Outside	3233.00		
Bullnose	3.00			3236.00	24.00	Bottom Packers & Anchor
Tota	l Tool Length: 44.0	0				



FLUID SUMMARY

36 deg API

82000 ppm

Zinszer Oil Co., Inc.

33-8S-19W Ellis, KS

PO Box 211 Hays, KS 67601 Amrein #3

Job Ticket: 64835

Serial #:

DST#: 3

ATTN: Marc Downing

Test Start: 2015.11.03 @ 11:59:53

Oil API:

Water Salinity:

Mud and Cushion Information

Mud Type: Gel Chem Mud Weight:

9.00 lb/gal

Viscosity: 50.00 sec/qt

Water Loss:

Resistivity:

Salinity: Filter Cake:

8.79 in³ ohm.m

2000.00 ppm

Cushion Type:

Cushion Length: Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
620.00	SMW, 5%M 95%W	8.493
186.00	SGOCMW, 10%G 20%O 40%W 30%M	2.637
47.00	CO	0.666
0.00	326' GIP	0.000

Total Length:

853.00 ft

Total Volume:

11.796 bbl

0

Num Fluid Samples: 0 Laboratory Name:

Num Gas Bombs:

Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc

Ref. No: 64835

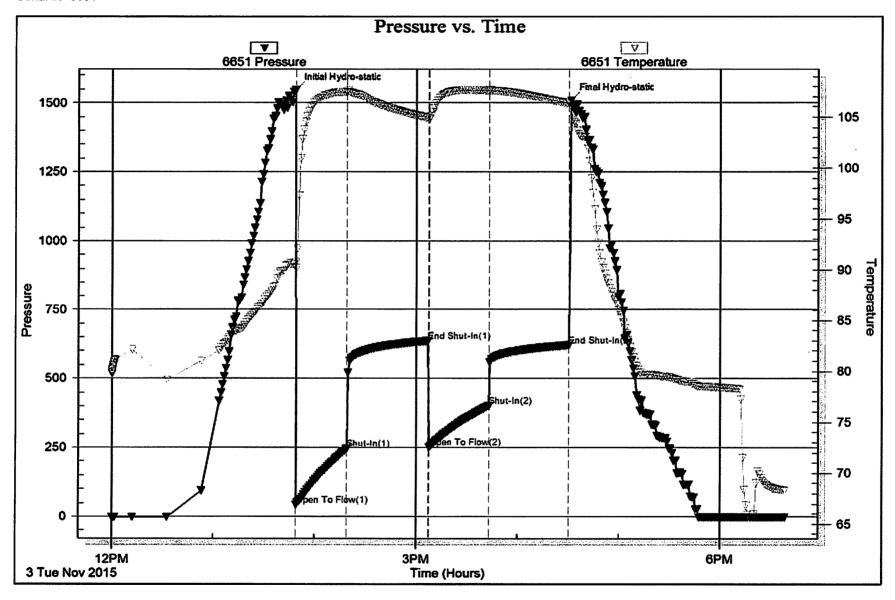
Serial #: 6651

Inside

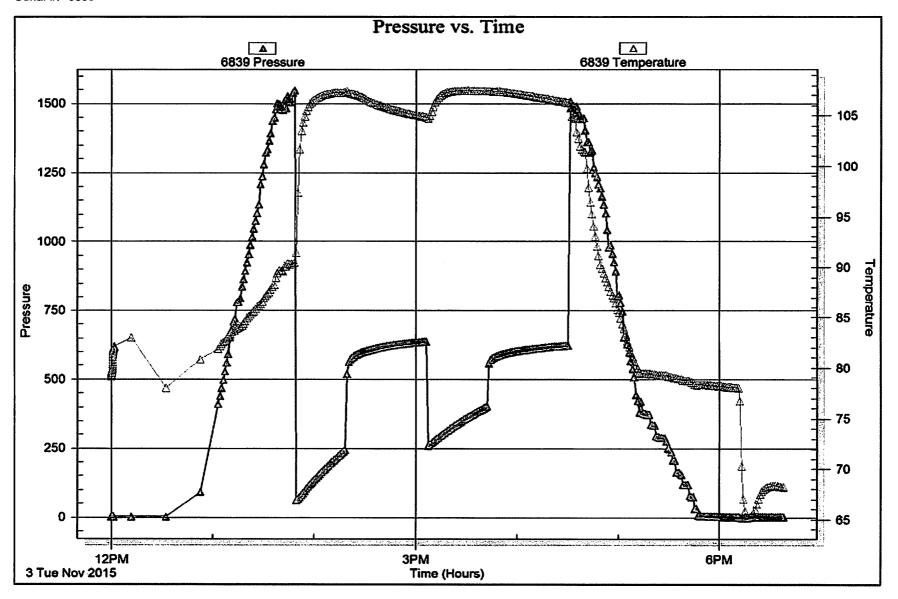
Zinszer Oil Co., Inc.

Amrein #3

DST Test Number: 3



Serial #: 6839 Outside Zinszer Oil Co., Inc. Amrein #3 DST Test Number: 3



Tritobite Testing, Inc Ref. No: 64835 Printed: 2015.11.05 @ 10:35:20



Prepared For: Zinszer Oil Co., Inc.

PO Box 211 Hays, KS 67601

ATTN: Marc Downing

Amrein #3

33-8S-19W Ellis,KS

Start Date: 2015.11.04 @ 05:50:53 End Date: 2015.11.04 @ 12:28:23

Job Ticket #: 64836

DST#: 4

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

33-8S-19W Ellis,KS

Amrein #3 DST #4 LKC "H-J" 2015.11.04



Zinszer Oil Co., Inc.

33-8S-19W Ellis, KS

PO Box 211 Hays, KS 67601 Amrein #3

Job Ticket: 64836

DST#:4

ATTN: Marc Downing

ft (KB)

Test Start: 2015.11.04 @ 05:50:53

GENERAL INFORMATION:

Time Tool Opened: 07:38:23

Time Test Ended: 12:28:23

Formation:

LKC "H - J"

Deviated:

No Whipstock:

Test Type:

Conventional Bottom Hole (Reset)

Tester:

Brannan Lonsdale

Unit No:

Interval:

3307.00 ft (KB) To 3372.00 ft (KB) (TVD)

Reference Bevations:

2003.00 ft (KB)

Total Depth:

3130.00 ft (KB) (TVD)

1995.00 ft (CF)

Hole Diameter:

7.88 Inches Hole Condition: Fair

KB to GR/CF:

8.00 ft

Serial #: 6651 Press@RunDepth: Inside

322.84 psig @

3369.00 ft (KB)

Capacity:

8000.00 psig

Start Date:

2015.11.04

End Date:

2015.11.04

Last Calib.:

2015.11.04

Start Time:

05:50:54

End Time:

12:28:23

Time On Btm:

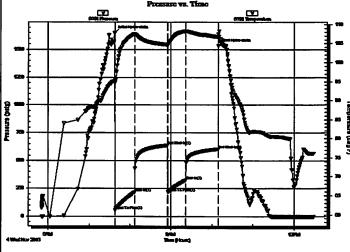
2015.11.04 @ 07:37:53

Time Off Btm:

2015.11.04 @ 10:09:23

TEST COMMENT: 30- IF- BOB 6 mins

45- ISI- No blow 30- FF- BOB 8 mins 45- FSI- No blow



	PRESSURE SUMMARY					
•]	Time	Pressure	Temp	Annotation		
.	(Min.)	(psig)	(deg F)			
	0	1650.78	95.24	Initial Hydro-static		
	1	54.20	94.76	Open To Flow (1)		
	29	217.17	107.39	Shut-In(1)		
-	77	638.97	104.71	End Shut-In(1)		
8	78	217.68	104.51	Open To Flow (2)		
Temperature (dag F)	104	322.84	108.19	Shut-In(2)		
	151	605.02	106.73	End Shut-In(2)		
3	152	1533.34	107.45	Final Hydro-static		

Recovery

Length (ft)	Description	Volume (bbl)
310.00	MW, 5%M 95%W	4.10
341.00	OCMW, 15%O 30%M 55%W	4.83
15.00	co	0.21

	Gas	Rates	

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

Trilobite Testing, Inc

Ref. No: 64836



Zinszer Oil Co., Inc.

33-8S-19W Ellis, KS

PO Box 211 Hays, KS 67601 Amrein #3 Job Ticket: 64836

DST#:4

ATTN: Marc Downing

Test Start: 2015.11.04 @ 05:50:53

GENERAL INFORMATION:

Time Tool Opened: 07:38:23

Time Test Ended: 12:28:23

Formation:

LKC "H - J"

Deviated:

No Whipstock:

ft (KB)

Test Type:

Conventional Bottom Hole (Reset)

Tester:

Brannan Lonsdale

Unit No:

62

3307.00 ft (KB) To 3372.00 ft (KB) (TVD)

Interval: Total Depth:

Hole Diameter:

3130.00 ft (KB) (TVD)

7.88 inches Hole Condition: Fair

Reference Elevations:

2003.00 ft (KB) 1995.00 ft (CF)

KB to GR/CF:

8.00 ft

Serial #: 6839 Press@RunDepth: Outside

psig @

3369.00 ft (KB)

Capacity:

8000.00 psig

Start Date:

2015.11.04

End Date:

2015.11.04

Last Calib.: Time On Btm: 2015.11.04

Start Time:

05:50:35

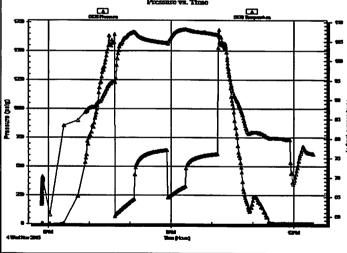
End Time:

12:28:34

Time Off Btm:

TEST COMMENT: 30- IF- BOB 6 mins

45- ISI- No blow 30- FF- BOB 8 mins 45- FSI- No blow



	PRESSURE SUMMARY						
•	Time	Pressure	Temp	Annotation			
6	(Min.)	(psig)	(deg F)				
_							
•							
•							
Temperatura (deg P)							
) e.m.							
, sa ,							
5							
•							
3							
•							

Length (ft)	Description	Volume (bbl)
310.00	MW, 5%M 95%W	4.10
341.00	OCMW, 15%O 30%M 55%W	4.83
15.00	co	0.21
Recovery from r	multiple tests	_

Gas Rat	es	
Choke (inches)	Pressure (psig)	Gas Rate (

Trilobite Testing, Inc.

Ref. No: 64836



TOOL DIAGRAM

Zinszer Oil Co., Inc.

33-8S-19W Ellis,KS

PO Box 211 Hays, KS 67601 Amrein #3

Job Ticket: 64836

DST#:4

ATTN: Marc Downing

Test Start: 2015.11.04 @ 05:50:53

Tool Information

Drill Pipe: Heavy Wt. Pipe: Length:

Length: 3281.00 ft Diameter:

ft Diameter:

3.82 inches Volume: inches Volume:

46.51 bbl - bbl Tool Weight:

2000.00 lb

Drill Collar:

Length:

32.00 ft Diameter:

Diameter:

2.25 inches Volume:

Weight set on Packer: 25000.00 lb Weight to Pull Loose: 56000.00 lb 0.16 bbl

Drill Pipe Above KB:

26.00 ft 3307.00 ft Total Volume: - bbl

3337.00

3368.00

3369.00

3369.00

3369.00

3372.00

Tool Chased

0.00 ft

Depth to Top Packer: Depth to Bottom Packer: ft

String Weight: Initial 44000.00 lb

65.00

Final 48000.00 lb

Interval between Packers: Tool Length:

65.00 ft 85.00 ft 2

6.75 inches

Number of Packers: **Tool Comments:**

Change Over Sub

Drill Pipe

Recorder

Recorder

Bullnose

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3288.00		
Shut in Tool	5.00			3293.00		
Hydraulic tool	5.00			3298.00		
Packer	5.00			3303.00	20.00	Bottom Of Top Packer
Packer	4.00	-		3307.00		
Stubb	1.00			3308.00		
Perforations	28.00			3336.00		

31.00 Change Over Sub 1.00 0.00 6651 Inside 0.00 6839 Outside 3.00

85.00

Total Tool Length:

1.00

Bottom Packers & Anchor

Trilobite Testing, Inc

Ref. No: 64836



FLUID SUMMARY

Zinszer Oil Co., Inc.

33-8S-19W Ellis, KS

PO Box 211 Hays, KS 67601 Amrein #3

Job Ticket: 64836

DST#: 4

ATTN: Marc Downing

Test Start: 2015.11.04 @ 05:50:53

Oil API:

Mud and Cushion Information

Mud Type: Gel Chem Mud Weight:

9.00 lb/gal

50.00 sec/qt

Viscosity: Water Loss:

8.79 in³ ohm.m

Salinity: Filter Cake: 2000.00 ppm

inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

psig

ft

bbl

Water Salinity:

34 deg API 95000 ppm

Resistivity:

Recovery Information

Recovery Table

Length Description Volume ft bbl 310.00 MW, 5%M 95%W 4.098 341.00 OCMW, 15%O 30%M 55%W 4.834 15.00 co 0.213

Total Length:

666.00 ft

Total Volume:

9.145 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

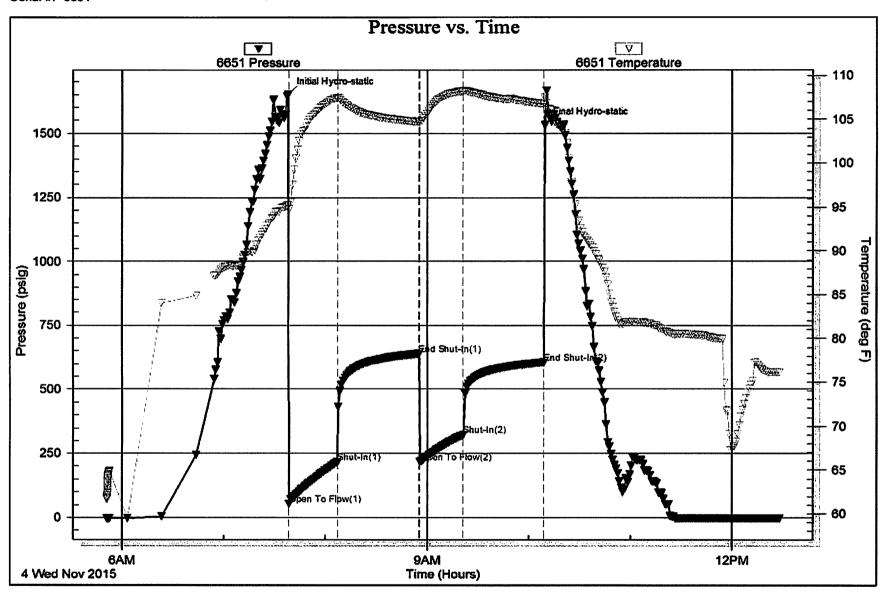
Recovery Comments:

Laboratory Name: Laboratory Location:

Trilobite Testing, Inc

Ref. No: 64836

Serial #: 6651 Inside Zinszer Oil Co., Inc. Amrein #3 DST Test Number: 4



Tritobite Testing, Inc.

Ref. No: 64836

Serial #: 6839

Outside Zinszer Oil Co., Inc.

Amrein #3

DST Test Number: 4

