

Confid	entiali	ty Requested:
Yes		No

Kansas Corporation Commission Oil & Gas Conservation Division

1236504

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			
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.xxxxxx) (e.gxxx.xxxxxx)			
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84			
Purchaser:	County:			
Designate Type of Completion:	Lease Name: Well #:			
New Well Re-Entry Workover	Field Name:			
☐ Oil ☐ WSW ☐ SHOW ☐ 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:	Producing Formation: Elevation: Ground: Kelly Bushing: Feet Total Vertical Depth: Plug Back Total Depth: Feet Multiple Stage Cementing Collar Used? Yes No If yes, show depth set: Feet If Alternate II completion, cement circulated from: sx cmt.			
Original Comp. Date: Original Total Depth: Deepening Re-perf. Conv. to ENHR Conv. to SWD Plug Back Conv. to GSW Conv. to Producer	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)			
Commingled Permit #:	Chloride content: ppm Fluid volume: bbls Dewatering method used: Location of fluid disposal if hauled offsite: Operator Name:			
GSW Permit #:	Lease Name:			
Spud Date or Date Reached TD Completion Date or 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 Approved by: Date:



Operator Name:			Lease Name: _			Well #:	
Sec Twp	S. R	East West	County:				
open and closed, flow	ring and shut-in pressu	ormations penetrated. Eures, whether shut-in predict final chart(s). Attach	essure reached stati	c level, hydrosta	atic pressures, bott		
		otain Geophysical Data a or newer AND an image		gs must be ema	ailed to kcc-well-lo	gs@kcc.ks.go	v. Digital electronic log
Drill Stem Tests Taker (Attach Additional S		Yes No		_	on (Top), Depth an		Sample
Samples Sent to Geo	logical Survey	Yes No	Nam	e		Тор	Datum
Cores Taken Electric Log Run		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 Percent Additives
	Donth		. CEMENTING / SQL	JEEZE RECORD			
Purpose: Perforate Protect Casing Plug Back TD Plug Off Zone	Depth Top Bottom	Type of Cement	# Sacks Used	S Used Type and Percent Additives			
	ulic fracturing treatment o	n this well?		Yes	No (If No, ski	p questions 2 aı	nd 3)
Does the volume of the to	otal base fluid of the hydr	aulic fracturing treatment ex submitted to the chemical	_	= :	No (If No, ski	p questions 2 at p question 3) out Page Three	
Shots Per Foot	PERFORATION Specify For	N RECORD - Bridge Plug ootage of Each Interval Per	s Set/Type forated		cture, Shot, Cement mount and Kind of Ma		d Depth
				,			
TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run:	Yes No		
Date of First, Resumed	Production, SWD or ENH	IR. Producing Meth		Gas Lift (Other (Explain)		
Estimated Production Per 24 Hours	Oil B	bls. Gas	Mcf Wate	er B	bbls. G	as-Oil Ratio	Gravity
DISPOSITIO	ON OF GAS:	Open Hole		Comp. Con	mmingled	PRODUCTIO	ON INTERVAL:
(If vented, Sul	bmit ACO-18.)	Other (Specify)	(Submit)	400-5) (Sub	omit ACO-4)		

Form	ACO1 - Well Completion				
Operator	Vincent Oil Corporation				
Well Name	Hawes Ranch 2-22				
Doc ID	1236504				

All Electric Logs Run

Dual Induction	
Density - Neutron	
Micro-log	
Sonic	

Form	ACO1 - Well Completion
Operator	Vincent Oil Corporation
Well Name	Hawes Ranch 2-22
Doc ID	1236504

Tops

Name	Тор	Datum	
Heebner Shale	4301	(-1811)	
Brown Limestone	4439	(-1949)	
Lansing	4451	(-1961)	
Stark Shale	4769	(-2279)	
Pawnee	4979	(-2489	
Cherokee Shle	5024	(-2534)	
Base Penn Limestone	5125	(-2635)	
Mississippian	5177	(-2687)	
RTD	5215	(-2725)	

Form	ACO1 - Well Completion				
Operator	Vincent Oil Corporation				
Well Name	Hawes Ranch 2-22				
Doc ID	1236504				

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Type and Percent Additives
Surface casing	12.25	8.6250	23	644	MDC & Class A	0-2% Gel, 0-3% CC & 1/4# Flo-seal/sx

QUALITY WELL SERVICE, INC. Federal Tax I.D. # 481187368

Home Office 324 Simpson St., Pratt, KS 67124

Office 620-727-3410 Fax 620-672-3663

Rich's Cell 620-727-3409 Brady's Call 620-727-6964

6205

1 dx 020-01 2-0000				Diauy	3 Cell 020-727-	0304
Sec.	Twp. Range		County	State	On Location	Finish
Date 09 04 14 22	285 23w	For	ed.	KS	5:00 Am	800/1 m
Lease Hawes Kanch W	Vell No. 2-22	Locati	on Kings	boun 2N, 3W,	13/4 E & W/	into
Contractor Val #	1	1	Owner			
Type Job Suntace			To Quality We You are here	ell Service, Inc. by requested to rent	cementing equipmen	t and furnish
Hole Size 2/4	T.D. 644		cementer an	d helper to assist ow	ner or contractor to de	o work as listed.
Csg. 8 5/4 23#	Depth 644	-	Charge V	ncent		
Tbg. Size	Depth	3, 1	Street			
Tool	Depth	-	City		State	
Cement Left in Csg. 40	Shoe Joint 40	_	1	1	nd supervision of owner	agent or contractor.
Meas Line	Displace 36 ADDIS	nes	Cement Amo	ount Ordered /25	5x/1)DC+19#1	-loseal 7
EQUIPM	MENT		1255xc	lass A + 2%9	el + 3%cc + 1	1期5
Pumptrk 8 No. Sould		- 11	Common /	25		
Bulktrk 10 No. Dou'd B			Poz. Mix M	DC 125		
Bulktrk 7 No. Mike 15		11 11	Gel. //	1		
Pickup No.		eta	Calcium /O	= 188 m		
JOB SERVICES	& REMARKS		Hulls	A 4		
Rat Hole	1 11 11 11		Salt			
Mouse Hole	1/30/4"	_ 4	Flowseal 66.25			
Centralizers	n2 90	. 4	Kol-Seal			
Baskets	The state of	-	Mud CLR 48			
D/V or Port Collar Ray 15/15	8-9/8 (59)		CFL-117 or CD110 CAF 38			
Pipeon BHM, Break	Circo, Pump Span	cen	Sand			
nix 125 x light 4	125 x to / Ce	neot	Handling 6	771		
Stop-Release Pi	ug, Start D.	'sp.	Mileage 5	0		17
W/FRESHHO, Wash	up on Plug, See			FLOAT EQUIPM	ENT	
Stendy increase in ps	t, Slow Rat	e	Guide Shoe			
Bump P	lug @ 38/2 6	BBIS	Centralizer			
Lotal Disp. From:	250 # 1600) 1	Baskets			
Shut in Camer	to did Cinci		AFU Inserts	Baffle Pl	cte	12
182	4	-	Float Shoe			
	Ad		Latch Down	Wooden Cupfi	Ug	HIFFE.
	LMU	50	/	77		
7			Service	SUBBLUIS SEE		
			Pumptrk Cha	arge Surface		All of the
(-	H.		Mileage 5	0 x 2	13	3°
	1		EA T	. 12 SE	Tax	
10/	10			1 418 13	Discount	
Signature Au	rell	62	*	2 \$ m	Total Charge	
			11			Taylor Printing Inc

6242

QUALITY WELL SERVICE, INC. Federal Tax I.D. # 481187368

Home Office 324 Simpson St., Pratt, KS 67124

Office 620-727-3410 Fax 620-672-3663

Rich's Cell 620-727-3409 **Brady's Cell 620-727-6964**

	0 1	_							
	Sec.	Twp. 28	Range 23	For	County	State KS	On Location	Finish 7:30	
Lease Hawes Ranch	We	ell No.	2.22	Location	on Kingsdon		, ZN. East.		
Contractor Va					Owner				
Type Job Rotury Plug.					To Quality We	ell Service, Inc. by requested to rent	cementing equipmen	at and furnish	
Hole Size 12'/4		T.D. (044		cementer an	d helper to assist own	ner or contractor to d	o work as listed.	
Csg. 85/8		Depth	644		Charge V	ncent			
Tbg. Size	10	Depth			Street				
Tool		Depth			City		State		
Cement Left in Csg.		Shoe Jo	oint		The above wa	s done to satisfaction ar	nd supervision of owner	agent or contractor.	
Meas Line		Displac	e		Cement Amo	ount Ordered Z20	sx 60/40 4	106 Gel	
	QUIPM	ENT			14 C.F.				
Pumptrk D	21ch				Common	35			
Bulktrk 10 No.	Dord			-	Poz. Mix	35			
Bulktrk No.					Gel. 8				
Pickup No.	Dard				Calcium				
JOB SER	VICES 8	REMA	RKS		Hulis				
Rat Hole 305x					Salt				
Mouse Hole ZOSk					Flowseal 55				
Centralizers		7			Kol-Seal				
Baskets					Mud CLR 48				
D/V or Port Collar					CFL-117 or CD110 CAF 38				
1st Pumped 50st	60/	40 4	% Gel 2		Sand				
1500'					Handling 2	38)	
-					Mileage 5	0			
2nd Pumped 50sx	601	40 4	106 Gel a	9		FLOAT EQUIPM	ENT		
670					Guide Shoe				
					Centralizer				
310 Pumped 50sx	60	140	48 601	a	Baskets				
300'					AFU Inserts				
					Float Shoe				
4th Pumper 205x 60/40 4% 6e/ 2					Latch Down				
60' to suface.					LMU 50				
					Service Supervision				
					Pumptrk Charge Rotery Plug				
					Mileage So X Z				
							Tax		
SAT /							Discount		
X Signature	Signature / Co						Total Charge		



Vincent Oil Corporation

22-28S-23W Ford

Job Ticket: 57759

Reference Elevations:

155 N Market Ste 700 Wichita, KS 67202 Hawes Ranch 2-22

Test Start: 2014.09.11 @ 10:00:15

ATTN: Tom Dudgeon

GENERAL INFORMATION:

Formation: Mississippi

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

Time Tool Opened: 12:19:30 Tester: Leal Cason
Time Test Ended: 18:59:45 Unit No: 74

Interval: 5108.00 ft (KB) To 5176.00 ft (KB) (TVD)

Total Depth: 5176.00 ft (KB) (TVD)

2477.00 ft (CF)

2487.00 ft (KB)

DST#: 1

Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 10.00 ft

Serial #: 6798 Inside

Press @ RunDepth: 47.49 psig @ 5109.00 ft (KB) Capacity: 8000.00 psig

 Start Date:
 2014.09.11
 End Date:
 2014.09.11
 Last Calib.:
 2014.09.11

 Start Time:
 10:00:16
 End Time:
 18:59:45
 Time On Btm:
 2014.09.11 @ 12:16:00

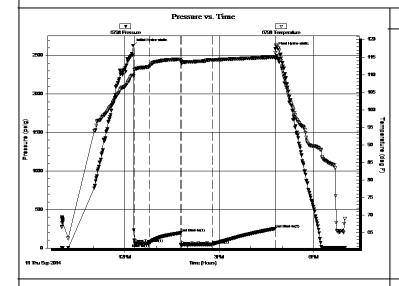
 Time Off Btm:
 2014.09.11 @ 16:47:15

TEST COMMENT: IF: Strong Blow , BOB in 20 seconds, GTS in 18 minutes, Gauged & Caught Sample

ISI: Blow Back Built to 6 inches

FF: Strong Blow, BOB & GTS immediate, TSTM

FSI: No Blow Back



PRESSURE SUMMARY

Time	Pressure	Temp	Annotation
(Min.)	(psig)	(deg F)	
0	2627.18	109.84	Initial Hydro-static
4	63.80	111.56	Open To Flow (1)
31	57.73	112.23	Shut-In(1)
91	197.35	114.38	End Shut-In(1)
92	38.62	113.62	Open To Flow (2)
151	47.49	114.20	Shut-In(2)
271	254.55	115.00	End Shut-In(2)
272	2582.25	116.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	5004 GIP	0.00
90.00	SGCM 2%G 98%M	1.26

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)	
First Gas Rate	0.25	18.00	51.40	
Last Gas Rate	0.25	18.00	51.40	

Trilobite Testing, Inc Ref. No: 57759 Printed: 2014.09.11 @ 23:14:59



FLUID SUMMARY

Vincent Oil Corporation

22-28S-23W Ford

155 N Market Ste 700 Wichita, KS 67202 Hawes Ranch 2-22

Job Ticket: 57759

DST#: 1

ATTN: Tom Dudgeon

Test Start: 2014.09.11 @ 10:00:15

Mud and Cushion Information

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

Viscosity: 50.00 sec/qt Cushion Volume: bbl

Water Loss: 9.99 in³ Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 8200.00 ppm Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	5004 GIP	0.000
90.00	SGCM 2%G 98%M	1.262

Total Length: 90.00 ft Total Volume: 1.262 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 57759 Printed: 2014.09.11 @ 23:15:00



GAS RATES

DST#: 1

Vincent Oil Corporation

22-28S-23W Ford

155 N Market Ste 700 Wichita, KS 67202

Hawes Ranch 2-22

Job Ticket: 57759

Test Start: 2014.09.11 @ 10:00:15

Gas Rates Information

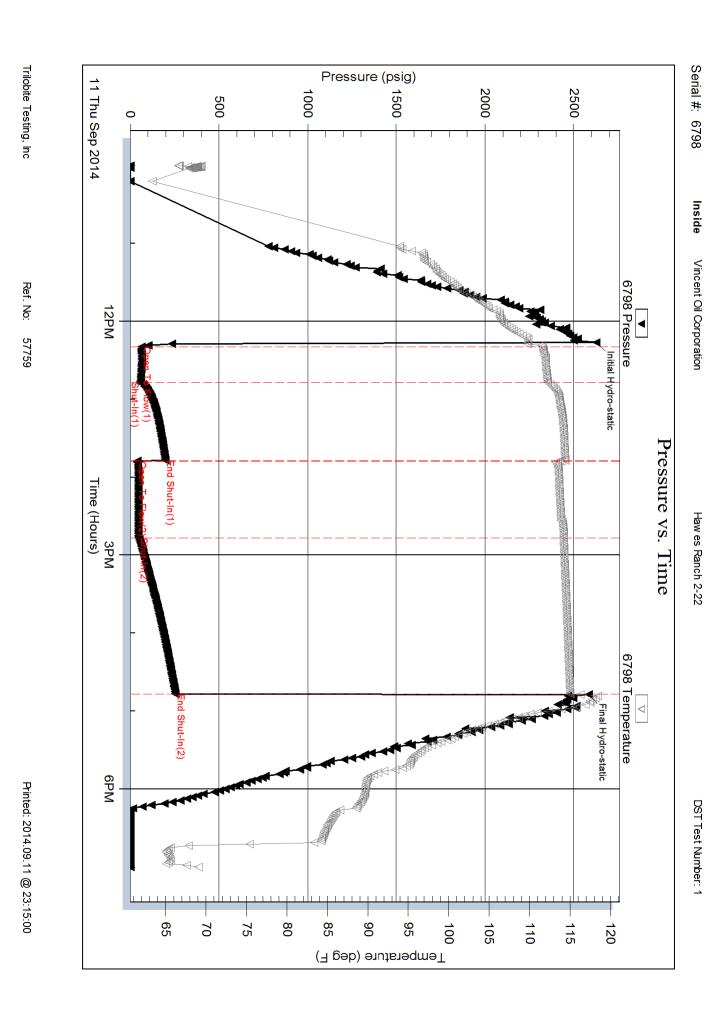
Temperature: 59 (deg F)

Relative Density: 0.65 Z Factor: 8.0

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
1	20	0.25	18.00	51.40
1	30	0.25	18.00	51.40

Trilobite Testing, Inc Ref. No: 57759 Printed: 2014.09.11 @ 23:15:00





Vincent Oil Corporation

22-28S-23W Ford

155 N Market Ste 700

Hawes Ranch 2-22

Wichita, KS 67202

Job Ticket: 57760 DST#: 2

ATTN: Tom Dudgeon Test Start: 2014.09.12 @ 05:51:44

GENERAL INFORMATION:

Formation: Mississippi

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

Time Tool Opened: 12:11:29 Tester: Leal Cason Time Test Ended: 17:10:29 Unit No: 74

Interval: 5182.00 ft (KB) To 5215.00 ft (KB) (TVD) Reference Elevations:

2487.00 ft (KB) Total Depth: 5215.00 ft (KB) (TVD) 2477.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 10.00 ft

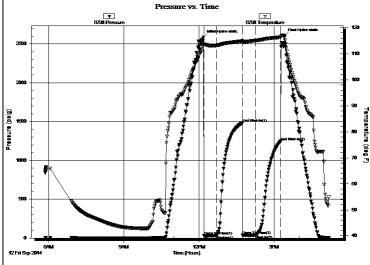
Serial #: 6798 Inside

Press@RunDepth: 5183.00 ft (KB) Capacity: 8000.00 psig 39.01 psig @

Start Date: 2014.09.12 End Date: 2014.09.12 Last Calib.: 2014.09.12 Start Time: 05:51:45 End Time: 17:10:29 Time On Btm: 2014.09.12 @ 12:10:29 2014.09.12 @ 15:24:14 Time Off Btm:

TEST COMMENT: IF: Weak 1/2 inch Blow

ISI:No Blow Back FF: Weak Surface Blow FSI: No Blow Back



	PRESSURE SUMMARY			
1	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
	0	2586.23	113.32	Initial Hydro-static
	1	27.81	113.38	Open To Flow (1)
	31	32.95	113.18	Shut-In(1)
	94	1485.92	114.87	End Shut-In(1)
	94	36.80	114.23	Open To Flow (2)
	125	39.01	115.05	Shut-In(2)
,	185	1246.88	116.33	End Shut-In(2)
,	194	2607.15	116.40	Final Hydro-static

DDESCLIDE SLIMMADV

Recovery

Length (ft)	Description	Volume (bbl)
40.00	Mud	0.56
* Recovery from mult	tiple tests	

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

Ref. No: 57760 Printed: 2014.09.12 @ 18:34:16 Trilobite Testing, Inc



FLUID SUMMARY

Vincent Oil Corporation

22-28S-23W Ford

155 N Market Ste 700 Wichita, KS 67202 Hawes Ranch 2-22

Job Ticket: 57760

Serial #:

DST#: 2

ATTN: Tom Dudgeon

Test Start: 2014.09.12 @ 05:51:44

Mud and Cushion Information

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

Mud Weight:9.00 lb/galCushion Length:ftViscosity:51.00 sec/qtCushion Volume:bbl

Water Loss: 9.99 in³ Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 8200.00 ppm Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	Mud	0.561

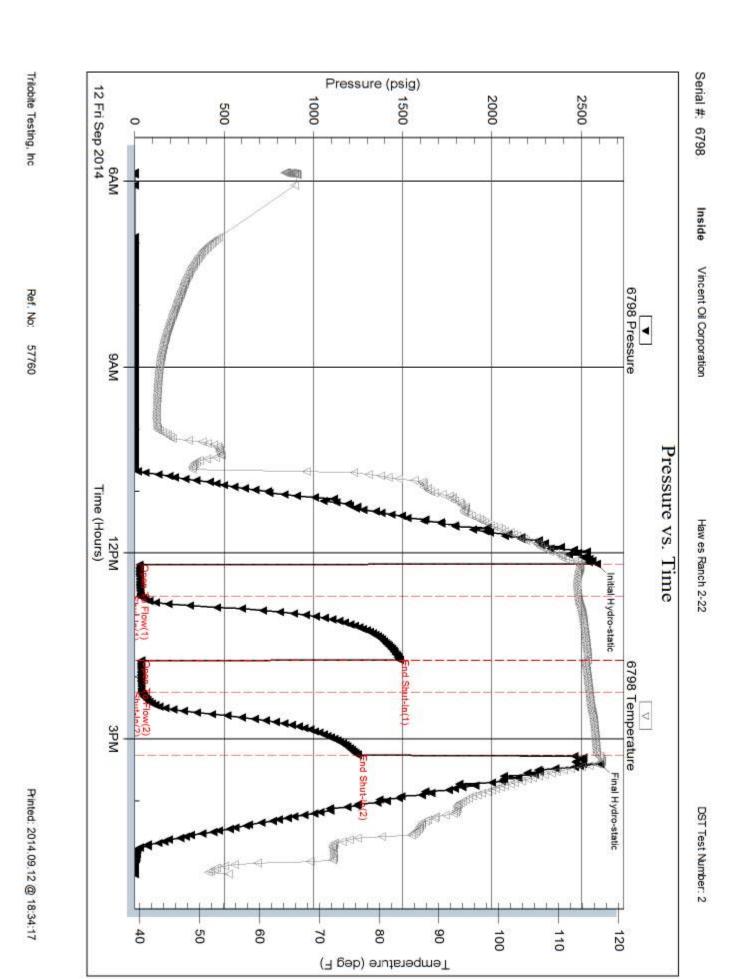
Total Length: 40.00 ft Total Volume: 0.561 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0

Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 57760 Printed: 2014.09.12 @ 18:34:16





Vincent Oil Corporation

22-28S-23W Ford

155 N Market Ste 700 Wichita, KS 67202

ATTN: Tom Dudgeon

Hawes Ranch 2-22

Job Ticket: 57761

DST#: 3

2477.00 ft (CF)

Test Start: 2014.09.13 @ 02:07:38

GENERAL INFORMATION:

Formation: Cherokee

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

Time Tool Opened: 04:35:08

Tester: Leal Cason
Time Test Ended: 10:41:38

Unit No: 74

Interval: 5022.00 ft (KB) To 5214.00 ft (KB) (TVD) Reference ⊟evations: 2487.00 ft (KB)

Total Depth: 5214.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 10.00 ft

Serial #: 6798 Inside

Press@RunDepth: 85.99 psig @ 5023.00 ft (KB) Capacity: 8000.00 psig

 Start Date:
 2014.09.13
 End Date:
 2014.09.13
 Last Calib.:
 2014.09.13

 Start Time:
 02:07:39
 End Time:
 10:41:38
 Time On Btm:
 2014.09.13 @ 04:33:23

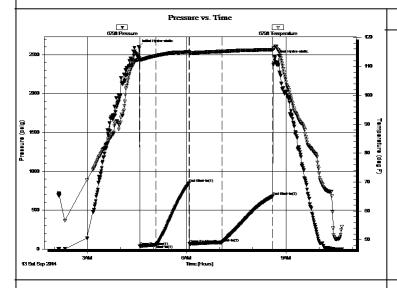
Time Off Btm: 2014.09.13 @ 08:39:08

TEST COMMENT: IF: Weak Blow , BOB in 22 minutes

ISI: No Blow Back

FF: Weak Blow, BOB in 21 minutes

FSI: No Blow Back



PRESSURE SUMMARY

Time	Pressure	Temp	Annotation
(Min.)	(psig)	(deg F)	
0	2603.94	112.49	Initial Hydro-static
2	36.37	112.27	Open To Flow (1)
32	55.87	113.66	Shut-In(1)
92	847.39	115.06	End Shut-In(1)
92	66.91	114.77	Open To Flow (2)
151	85.99	115.16	Shut-In(2)
243	680.61	115.78	End Shut-In(2)
246	2469.73	116.35	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)		
135.00	SGCM 2%G 98%M	1.89		
* Recovery from mul	* Recovery from multiple tests			

Gas Rates

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

Trilobite Testing, Inc Ref. No: 57761 Printed: 2014.09.13 @ 11:37:49



FLUID SUMMARY

Vincent Oil Corporation

22-28S-23W Ford

155 N Market Ste 700 Wichita, KS 67202 Hawes Ranch 2-22

Job Ticket: 57761

Serial #:

DST#: 3

ATTN: Tom Dudgeon

Test Start: 2014.09.13 @ 02:07:38

Mud and Cushion Information

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

Viscosity: 50.00 sec/qt Cushion Volume: bbl

Water Loss: 9.98 in³ Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 8200.00 ppm Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
135.00	SGCM 2% G 98% M	1.894

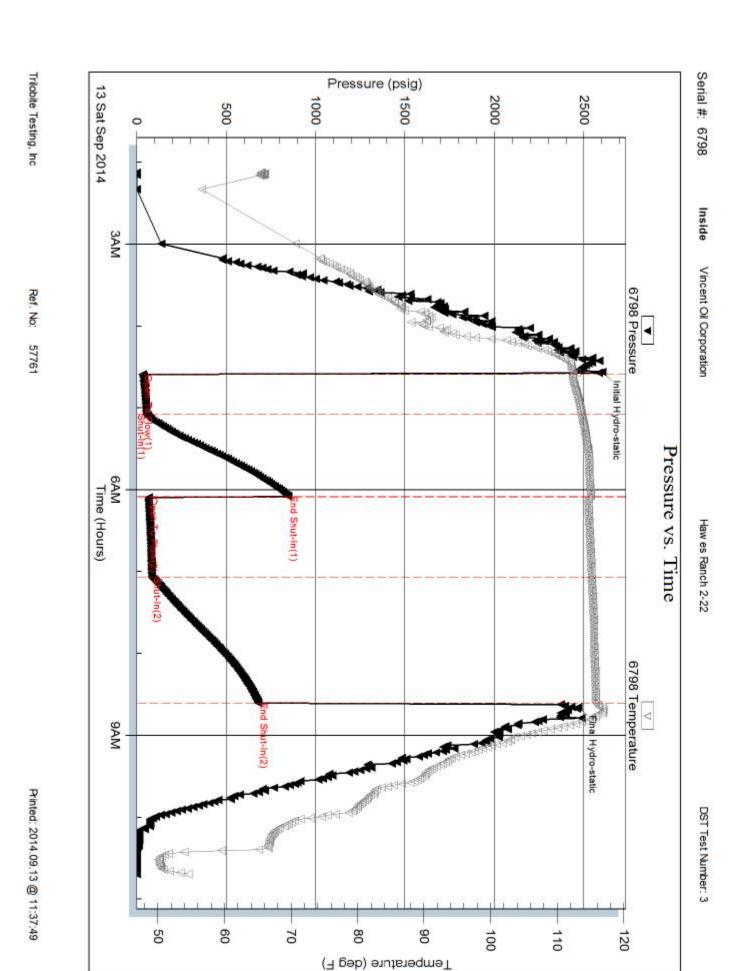
Total Length: 135.00 ft Total Volume: 1.894 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0

Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 57761 Printed: 2014.09.13 @ 11:37:49





Scale 1:240 Imperial

Well Name: Hawes Ranch 2-22

22-28S-23W NE NW NW SE Surface Location:

Bottom Location:

API: 15-057-20939-00-00

License Number:

Spud Date: 9/4/2014 Time: 1:37 PM

Region:

Drilling Completed: 9/12/2014 Time: 1:50 AM

Surface Coordinates: 2360 FSL & 2100 FEL

Bottom Hole Coordinates:

Ground Elevation: 2480.00ft K.B. Elevation: 2490.00ft Logged Interval: 4200.00ft

To: 5215.00ft

Total Depth: 5215.00ft Formation: MISS

Drilling Fluid Type:

OPERATOR

Vincent Oil Corporation Company: Address: 155 N Market Ste 700

Wichita, KS 67202

Contact Geologist: Dick Jordan Contact Phone Nbr: 316-262-3573

Well Name: Hawes Ranch 2-22

Location: 22-28S-23W NE NW NW SE Pool: Field:

Great Mogul Canyon State: **KANSAS** Country: USA

API:

15-057-20939-00-00

LOGGED BY

Vincent Oil Corporation Company: 155 N Market Ste 700 Address:

Wichita, KS 67202

Phone Nbr: 316-262-3573

Logged By: Geologist Name: Tom Dudgeon

CONTRACTOR

Contractor: Val Drilling

Rig #: 2 Rig Type: Rotary

Spud Date: 9/4/2014 1:37 PM Time: TD Date: 9/12/2014 1:50 AM Time: Rig Release: 9/13/2014 Time: 12:00 AM

SURFACE CO-ORDINATES

Well Type: Vertical

Longitude. -99.0200009

N/S Co-ord: 2360 FSL E/W Co-ord: 2100 FEL

ELEVATIONS

K.B. Elevation: 2490.00ft Ground Elevation: 2480.00ft

K.B. to Ground: 10.00ft

OPEN HOLE LOGS

Logging Company: Nabors Completion and Production Services, Co.

Logging Engineer: Jason Cappellucci

Truck #: 4854

Logging Date: 9/12/2014 Time Spent: 5

Logs Run: # Logs Run Successful: 4

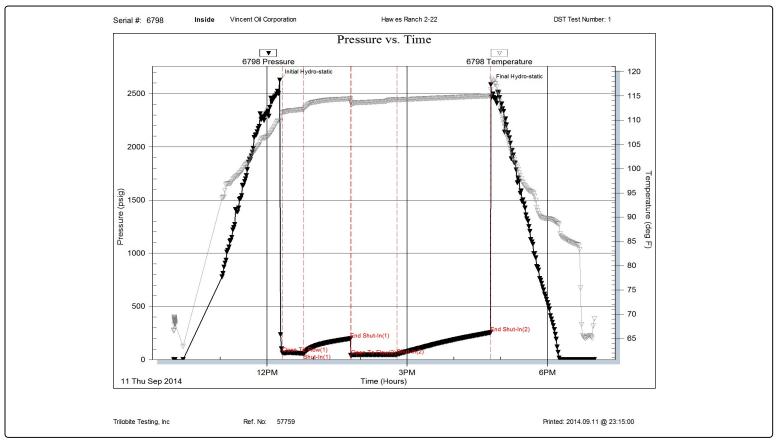
LOGS RUN

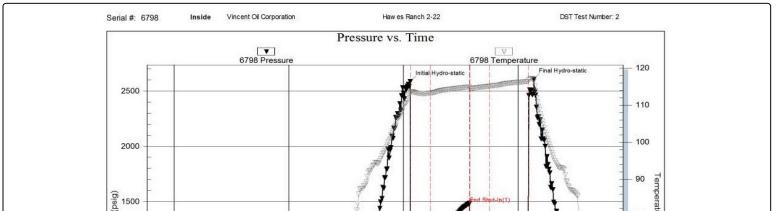
#

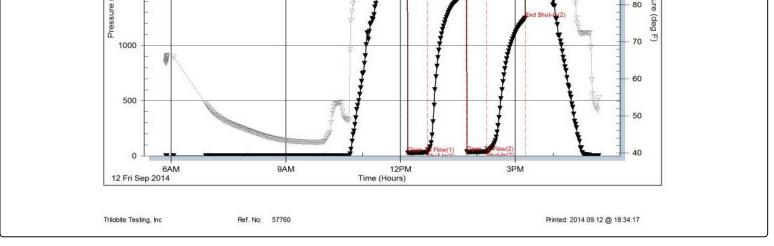
Tool	Logged Interval Logged Interval		Hours	Remarks	Run #
Dual Induction	0.00ft	5214.00ft	2.00		1
Neu/Den/PE	4200.00ft	5214.00ft	2.00		1
Micro	4200.00ft	5214.00ft	3.00		2
Sonic	0.00ft	5214.00ft	3.00		2

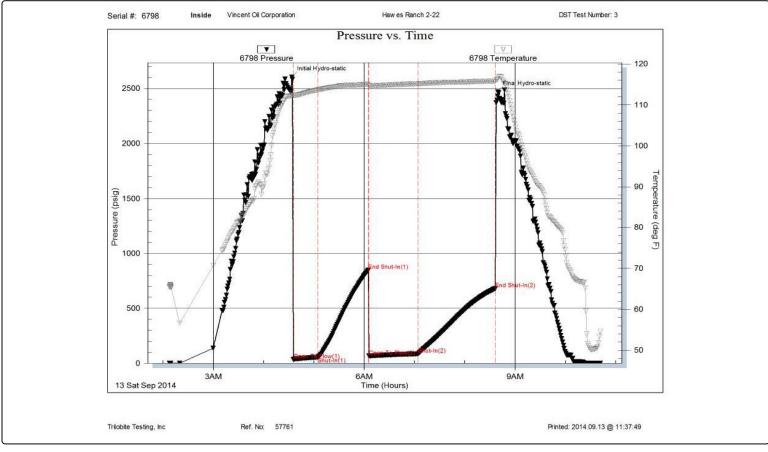
LOGGING OPERATION SUMMARY

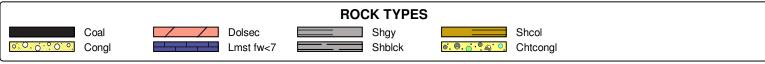
Date From To **Description Of Operation** 9/12/2014 0.00ft 5214.00ft Logs ran successfully











MINERAL

- Carbonaceous Flakes
- ▲ Chert, dark
- ∠ Dolomitic
- Ferruginous, grains or pe Glauconite
- Heavy, dark minerals
- Sandy
- ∧ Siliceous
- Silty
- △ Chert White

MISC

- # Fractures

FOSSIL

○ Crinoids

- F Fossils < 20%
- Oolite
- ∆ Spicules

ACCESSORIES

STRAT./SED. STRUCTS STRINGER

→ Massive

Dolomite · · · Sandstone

TEXTURE

- C Chalky
- CX Cryptocrystalline
- e Earthy
- FX FinexIn
- MX MicroxIn

OTHER SYMBOLS

POROSITY TYPE

× Intercrystalline

OIL SHOWS

Even Stn

INTERVALS

Core

IIILEI OOIILIC V Vuggy P Pinpoint Moldic کہ

O Organic

Spotted Stn 25 - 50 % O Spotted Stn 1 - 25 % O Questionable Stn

4250

10

Total Gas (units)

ROP (min/ft)

Spoiled 311 30 - 73 /6

- D Dead Oil Stn
- Fluorescence

F Fracture e Earthy Fenestral Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca) Curve Track #01 nterpreted Lithology Total Gas (units) Depth | Intervals ROP (min/ft) Geological Descriptions Comment **Cored Interval** 1:240 Imperial Fotal Gas (units) ROP (min/ft) 4110 4120 GEO ON LOC @ 12:00 PM 9/8/2014 GAS DETECTOR: BLOODHOUND UNIT 0779 provided by **BLUESTEM LABS** 4130 DRILL TIME KEPT FROM 4150 to TD 10' SAMPLES FROM 4200 to TD 4140 4150 4160 4170 4180 4190 MS, crm to off white, some pcs crystalline, soft, no fluor, NS CX rare Chert, tan, oolitic, fossilif. 4200 MS, crm, A.A., chalky matrix, soft, SH, gray, red لـ کـ 4210 SH, gray to brn, brick red, WS-PS, crm to gray, chalky in part, some large particles in a f-xln FX 4220 chalky matrix C MS-WS, crm to gray A.A., some Chert, inclusions, white, rare SS clusters in red SH, dull fluor, NS 4230 MS, crm to tan, firm to soft, sandy in part, NS, dull fluor, rare Chert, opaque white 4240 \triangle MS, A.A., some pcs w/ dead blk stn, no fluor, Chert, white, fossils Y (spicules) F

SH, gray to brn, some blk pcs, MS, crm, A.A., firm to soft, siliceous

crinoid stem in MS matrix, some pcs silty, NS

SH, blk, brn, gray, some sandy, MS, A.A. friable, NS

