



1074864

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ ☐ East ☐ West County: _____

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken ☐ Yes ☐ No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey ☐ Yes ☐ No Cores Taken ☐ Yes ☐ No Electric Log Run ☐ Yes ☐ No Electric Log Submitted Electronically ☐ Yes ☐ No <i>(If no, Submit Copy)</i> List All E. Logs Run:	☐ Log Formation (Top), Depth and Datum ☐ Sample Name Top Datum
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CASING RECORD ☐ New ☐ Used Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:		Size:	Set At:	Packer At:	Liner Run: ☐ Yes ☐ No
Date of First, Resumed Production, SWD or ENHR.			Producing Method: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other <i>(Explain)</i> _____		
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. <i>(Submit ACO-5)</i> ☐ Commingled <i>(Submit ACO-4)</i> ☐ Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Hartman Oil Co., Inc.
Well Name	Ward Twin 11
Doc ID	1074864

Tops

Name	Top	Datum
Heebner	3792	-887
Lansing	3838	-933
Base of KC	4311	-1406
Marmanton	4336	-1431
Pawnee	4422	-1517
Ft Scott	4452	-1547
Cherokee Shale	4468	-1563
Morrow Sand	4662	-1757
St Louis B	4704	-1799



PO BOX 31 Russell, KS 67665

INVOICE

Invoice Number: 127014

Invoice Date: Apr 26, 2011

Page: 1

Voice: (785) 483-3887

Fax: (785) 483-5566

Bill To:

Hartman Oil Co., Inc.
H2 Drilling & H2 Trucking
3545 W. Jones Avenue
Garden City, KS 67846

Federal Tax I.D.#: 20-5975804

Customer ID	Well Name# or Customer P.O.	Payment Terms	
Hart	Ward Twin #11 81485	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-03	Oakley	Apr 26, 2011	5/26/11

Quantity	Item	Description	Unit Price	Amount
96.00	MAT	Class A Common	16.25	1,560.00
64.00	MAT	Pozmix	8.50	544.00
6.00	MAT	Gel	21.25	127.50
40.00	MAT	Flo Seal	2.70	108.00
166.00	SER	Handling	2.25	373.50
70.00	SER	Mileage 166 sx @.11 per sk per mi	18.26	1,278.20
1.00	SER	Plug to Abandon	1,250.00	1,250.00
140.00	SER	Pump Truck Mileage	7.00	980.00
140.00	SER	Light Vehicle Mileage	4.00	560.00
1.00	CEMENTER	Terry Heinrich		
1.00	EQUIP OPER	Wayne McGhghy		
1.00	OPER ASSIST	Earl Rebarchek		
D&A A. T. Muehlen S-b-11				

ALL PRICES ARE NET, PAYABLE
30 DAYS FOLLOWING DATE OF
INVOICE. 1 1/2% CHARGED
THEREAFTER. IF ACCOUNT IS
CURRENT, TAKE DISCOUNT OF

\$ 1356.24

ONLY IF PAID ON OR BEFORE
May 21, 2011

Subtotal	6,781.20
Sales Tax	174.29
Total Invoice Amount	6,955.49
Payment/Credit Applied	
TOTAL	6,955.49

ALLIED CEMENTING CO., LLC. 039835

Federal Tax I.D.# 20-5975804

10 P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:

OKLEY

DATE <u>1-26-11</u>	SEC. <u>16</u>	TWP. <u>22S</u>	RANGE <u>33W</u>	CALLED OUT	ON LOCATION <u>12:30 AM</u>	JOB START <u>2:30 AM</u>	JOB FINISH <u>3:00 AM</u>
WARD <u>TWEN</u>	WELL # <u>11</u>	LOCATION <u>GARDEN CITY 9N-3W-NW</u>			COUNTY <u>FINNEY</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)			<u>IN</u>				

CONTRACTOR <u>H 2 # 2</u>	OWNER <u>SAME</u>
TYPE OF JOB <u>PTA</u>	
HOLE SIZE <u>7 7/8"</u>	T.D. <u>4800'</u>
CASING SIZE	DEPTH
TUBING SIZE	DEPTH
DRILL PIPE <u>4 1/2"</u>	DEPTH <u>1810'</u>
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT
CEMENT LEFT IN CSG.	
PERFS.	
DISPLACEMENT	

EQUIPMENT

PUMP TRUCK	CEMENTER <u>TERRY</u>
# <u>422</u>	HELPER <u>WAYNE</u>
BULK TRUCK	
# <u>404</u>	DRIVER <u>EARL</u>
BULK TRUCK	
#	DRIVER

REMARKS:

50 SKS AT 1810'
40 SKS AT 1100'
20 SKS AT 60'
20 SKS MUDS HOLE
30 SKS RAT HOLE

THANK YOU

CHARGE TO: HARTMAN OIL

STREET _____

CITY _____ STATE _____ ZIP _____

To Allied Cementing Co., LLC.

You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME STEVEN CRAIG

SIGNATURE Steven Craig

CEMENT
AMOUNT ORDERED
160 SKS 60/40 POZ MUDGEL 1/4" H₂O - SEAL

COMMON	<u>96 SKS</u>	@	<u>16.25</u>	<u>1560.00</u>
POZ MIX	<u>64 SKS</u>	@	<u>8.50</u>	<u>544.00</u>
GEL	<u>6 SKS</u>	@	<u>21.25</u>	<u>127.50</u>
CHLORIDE		@		
ASC		@		
	<u>Flo-Seal 40</u>	@	<u>2.70</u>	<u>108.00</u>
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>166 SKS</u>	@	<u>2.25</u>	<u>373.50</u>
MILEAGE	<u>11 PER SK/MILE</u>			<u>1278.20</u>
TOTAL				<u>3991.20</u>

SERVICE

DEPTH OF JOB	1810'	
PUMP TRUCK CHARGE		1250.00
EXTRA FOOTAGE	@	
MILEAGE	70 X 2	@ 7.00 980.00
MANIFOLD	@	
LIGHT VEHICLE 20 X 2	@ 4.00	560.00
	@	
TOTAL		2790.00

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	

TOTAL _____

SALES TAX (If Any) _____

TOTAL CHARGES _____

DISCOUNT _____ IF PAID IN 30 DAYS



PO BOX 31 Russell, KS 67665

Voice: (785) 483-3887
Fax: (785) 483-5566

INVOICE

Invoice Number: 126870

Invoice Date: Apr 16, 2011

Page: 1

Bill To:

Hartman Oil Co., Inc.
H2 Drilling & H2 Trucking
3545 W. Jones Avenue
Garden City, KS 67846

Federal Tax I.D.#: 20-5975804

81485

Customer ID	Well Name# or Customer P.O.	Payment Terms	
Hart	Ward Twin #11	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Apr 16, 2011	5/16/11

Quantity	Item	Description	Unit Price	Amount
150.00	MAT	Class A Common	16.25	2,437.50
23.00	MAT	Chloride	58.20	1,338.60
575.00	MAT	ALW Type A	15.00	8,625.00
144.00	MAT	Flo Seal	2.70	388.80
783.00	SER	handling	2.25	1,761.75
70.00	SER	Mileage 783 sx @.11 per sk per mi	86.13	6,029.10
1.00	SER	Surface	1,925.00	1,925.00
140.00	SER	Pump Truck Mileage	7.00	980.00
1.00	SER	Manifold & Head Rental	200.00	200.00
140.00	SER	Light Vehicle Mileage	4.00	560.00
1.00	EQP	8.5/8 AFU Insert	238.00	238.00
2.00	EQP	8.5/8 Basket	314.00	628.00
3.00	EQP	8.5/8 Centralizer	67.00	201.00
1.00	EQP	8.5/8 Rubber Plug	101.00	101.00
1.00	CEMENTER	Alan Ryan		
1.00	EQUIP OPER	Wayne McGhghy		
1.00	OPER ASSIST	Earl Rebarchek		
NEW WELL COMPLETION				

ALL PRICES ARE NET, PAYABLE
30 DAYS FOLLOWING DATE OF
INVOICE. 1 1/2% CHARGED
THEREAFTER. IF ACCOUNT IS
CURRENT, TAKE DISCOUNT OF

\$ 5082.75

ONLY IF PAID ON OR BEFORE
May 11, 2011

Subtotal	25,413.75
Sales Tax	1,039.86
Total Invoice Amount	26,453.61
Payment/Credit Applied	
TOTAL	26,453.61

At. Mulet
4-25-11

ALLIED CEMENTING CO., LLC. 039915

Federal Tax I.D.# 20-5975804

MIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:

Oddley/K1
7/12/11

DATE <i>4/16/11</i>	SEC. <i>16</i>	TWP. <i>22</i>	RANGE <i>33</i>	CALLED OUT	ON LOCATION <i>10:00pm</i>	JOB START <i>2:30p</i>	JOB FINISH <i>3:30pm</i>
LEASE <i>Ward Twp</i>	WELL # <i>11</i>	LOCATION <i>Garden City N to Barlow Rd</i>			COUNTY <i>Finney</i>	STATE <i>KS</i>	
OLD OR NEW (Circle one)			<i>3 1/2 W Ninto</i>				

CONTRACTOR *H2 #2*

TYPE OF JOB *Surface*

HOLE SIZE *12 1/4* T.D. *1780'*

CASING SIZE *8 5/8* DEPTH *1780*

TUBING SIZE DEPTH

DRILL PIPE *4 1/2* DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT *45.2*

CEMENT LEFT IN CSG. *45.2*

PERFS.

DISPLACEMENT *112 BBL H2O*

EQUIPMENT

PUMP TRUCK CEMENTER *Alan*

422 HELPER *Wayne*

BULK TRUCK

394 DRIVER *Earl*

BULK TRUCK

373 DRIVER *Mike*

OWNER *Same*

CEMENT

AMOUNT ORDERED *575 SK ALW Type A*

1/4 lb Flo Seal 370 CC

150 Corn 370 CC

COMMON *150* @ *16.25* *2437.50*

POZMIX @

GEL @

CHLORIDE *23* @ *58.00* *1338.60*

ASC @

ALW Type A - 575 SK @ *15.00* *8625.00*

Flo Seal 144 lb @ *2.70* *388.80*

HANDLING *283 SK* @ *2.35* *1761.25*

MILEAGE *119 SK/mile* @ *60.29* *10.10*

TOTAL *20580.25*

REMARKS:

Rm 8 5/8 Csg. Circulate Ball Thru Insert
1/2 hr on Bottom. Mix 575 ALW 1/4 Flo Seal, 370 CC
Tail w/ 150 Corn 370 CC Displace
Plug w/ 112 BBL H2O. 200 PSI Lift
Blump Plug @ 1000 PSI. Float
Held.
Cement Did Circulate.
Thank You Alan, Wayne,
Earl, Mike

SERVICE

DEPTH OF JOB *1780*

PUMP TRUCK CHARGE *1925.00*

EXTRA FOOTAGE @

MILEAGE *70 x 2* @ *7.00* *980.00*

MANIFOLD & Head @ *200.00* *200.00*

Lite Vehicle *70 x 2* @ *4.00* *560.00*

TOTAL *3665.00*

CHARGE TO: *Hartman Oil*

STREET

CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

AFU Insert 1 @ *238.00*

Baskets - 2 @ *314.00* *628.00*

Centralizer - 3 @ *67.00* *201.00*

Rubber Plug - 1 @ *101.00* *101.00*

TOTAL *1168.00*

To Allied Cementing Co., LLC.

You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME

SIGNATURE *Kevin Longdon*

SALES TAX (If Any)

TOTAL CHARGES

DISCOUNT IF PAID IN 30 DAYS



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Hartman Oil Co**

10500 E Berkeley Sq Pkwy
Ste 100
Wichita, KS 67206

ATTN: Charlie Sturdavant

16-22s-33w Finney,KS

Ward #11 Twin

Start Date: 2011.04.23 @ 03:48:00

End Date: 2011.04.23 @ 13:02:45

Job Ticket #: 041205 DST #: 1

 **FILE**

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

ORIGINAL

Printed: 2011.05.03 @ 13:59:50 Page 1

Hartman Oil Co

Ward #11 Twin

16-22s-33w Finney,KS

DST # 1

Cherokee

2011.04.23



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Hartman Oil Co

10500 E Berkeley Sq Pkwy
Ste 100
Wichita, KS 67206
ATTN: Charlie Sturdavant

Ward #11 Twin

16-22s-33w Finney, KS

Job Ticket: 041205 DST#: 1

Test Start: 2011.04.23 @ 03:48:00

GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:20:00

Time Test Ended: 13:02:45

Test Type: Conventional Bottom Hole

Tester: Kevin Mack

Unit No: 48

Interval: **4465.00 ft (KB) To 4593.00 ft (KB) (TVD)**

Total Depth: 4593.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2905.00 ft (KB)

2895.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: **6669** Outside

Press@RunDepth: 53.69 psig @ 4588.00 ft (KB)

Start Date: 2011.04.23

End Date:

2011.04.23

Start Time: 03:48:15

End Time:

13:02:45

Capacity: 8000.00 psig

Last Calib.: 2011.04.23

Time On Btm: 2011.04.23 @ 07:19:00

Time Off Btm: 2011.04.23 @ 10:25:30

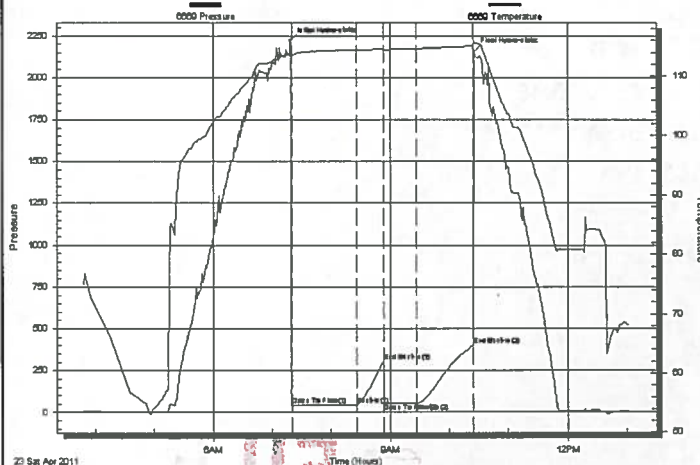
TEST COMMENT: IF: 1/2" blow built to 3/4", then died at 40 min.

IS: No Return

FF: No Blow

FS: No Return

Pressure vs. Time



PRESSURE SUMMARY

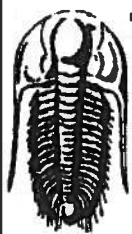
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2219.91	113.60	Initial Hydro-static
1	42.13	113.10	Open To Flow (1)
67	45.91	114.43	Shut-In(1)
95	303.16	114.59	End Shut-In(1)
95	55.03	114.49	Open To Flow (2)
128	53.69	114.61	Shut-In(2)
186	404.01	115.02	End Shut-In(2)
187	2156.96	115.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	OCWM 1%O 1%W 98%M	0.30

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hartman Oil Co

Ward #11 Twin

10500 E Berkeley Sq Pkwy

16-22s-33w Finney, KS

Ste 100

Job Ticket: 041205

DST#: 1

Wichita, KS 67206

Test Start: 2011.04.23 @ 03:48:00

ATTN: Charlie Sturdavant

Tool Information

Drill Pipe:	Length: 4211.00 ft	Diameter: 3.80 inches	Volume: 59.07 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 90000.00 lb
		Total Volume:	60.25 bbl	Tool Chased ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 74000.00 lb
Depth to Top Packer:	4465.00 ft			Final 74000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	128.00 ft			
Tool Length:	156.00 ft			
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			4438.00	
Shut In Tool	5.00			4443.00	
Hydraulic tool	5.00			4448.00	
Jars	5.00			4453.00	
Safety Joint	3.00			4456.00	
Packer	5.00			4461.00	28.00 Bottom Of Top Packer
Packer	4.00			4465.00	
Stubb	1.00			4466.00	
Perforations	27.00			4493.00	
Change Over Sub	1.00			4494.00	
Drill Pipe	93.00			4587.00	
Change Over Sub	1.00			4588.00	
Recorder	0.00	8358	Outside	4588.00	
Recorder	0.00	6669	Outside	4588.00	
Bullnose	5.00			4593.00	128.00 Bottom Packers & Anchor

Total Tool Length: 156.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Hartman Oil Co

Ward #11 Twin

10500 E Berkeley Sq Pkwy
Ste 100
Wichita, KS 67206
ATTN: Charlie Sturdavant

16-22s-33w Finney, KS

Job Ticket: 041205

DST#: 1

Test Start: 2011.04.23 @ 03:48:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 57.00 sec/qt

Water Loss: 7.19 in³

Resistivity: 0.00 ohm.m

Salinity: 1900.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	OCVM 1%O 1%W 98%M	0.295

Total Length: 60.00 ft Total Volume: 0.295 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

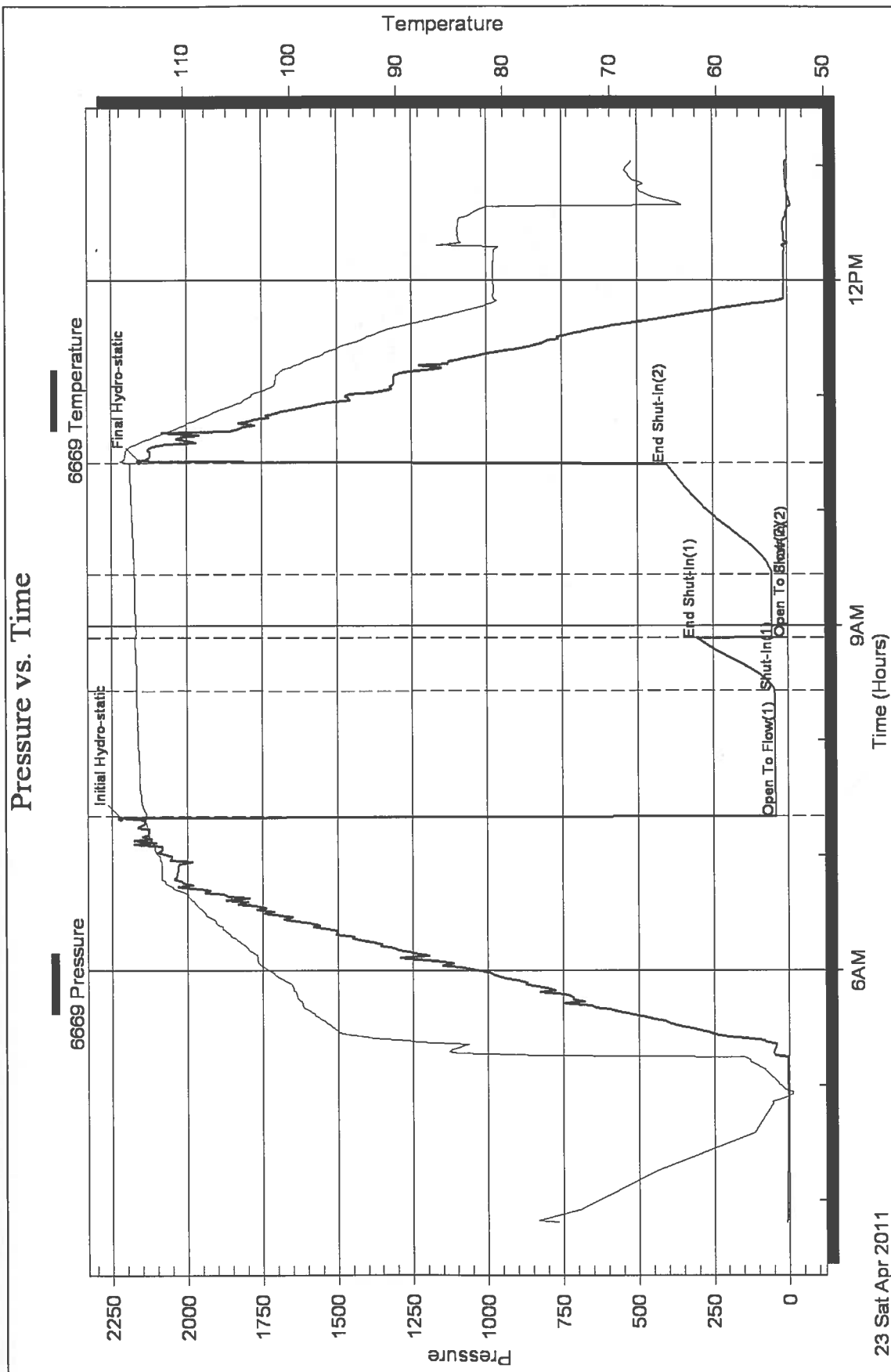
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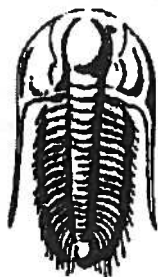
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Hartman Oil Co**

10500 E Berkeley Sq Pkwy
Ste 100
Wichita, KS 67206

ATTN: Charlie Sturdavant

16-22s-33w Finney,KS

Ward #11 Twin

Start Date: 2011.04.24 @ 12:22:00

End Date: 2011.04.24 @ 20:33:15

Job Ticket #: 041206 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Hartman Oil Co

10500 E Berkeley Sq Pkwy
Ste 100
Wichita, KS 67206
ATTN: Charlie Sturdavant

Ward #11 Twin

16-22s-33w Finney, KS

Job Ticket: 041206

DST#: 2

Test Start: 2011.04.24 @ 12:22:00

GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:01:15

Time Test Ended: 20:33:15

Interval: **4698.00 ft (KB) To 4715.00 ft (KB) (TVD)**

Total Depth: **4715.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: Good

Test Type: Conventional Bottom Hole

Tester: Kevin Mack

Unit No: 48

Reference Elevations: 2905.00 ft (KB)

2895.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: **6669**

Outside

Press@RunDepth: 39.02 psig @ 4710.00 ft (KB)

Start Date: 2011.04.24

End Date: 2011.04.24

Start Time: 12:22:15

End Time: 20:33:15

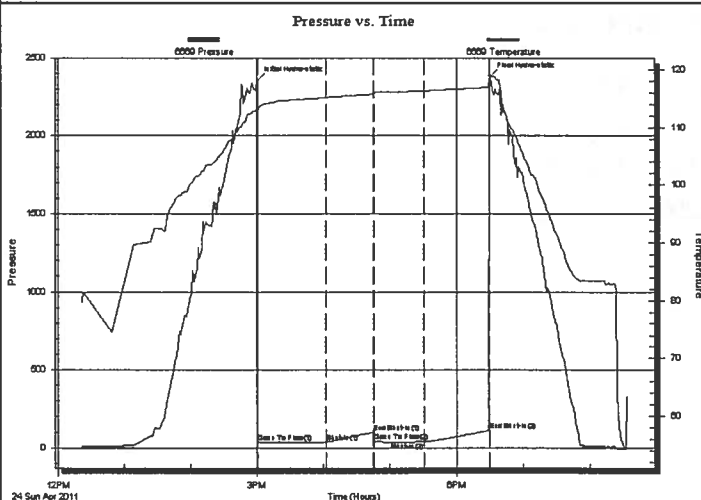
Capacity: 8000.00 psig

Last Calib.: 2011.04.24

Time On Btm: 2011.04.24 @ 15:01:00

Time Off Btm: 2011.04.24 @ 18:30:30

TEST COMMENT: IF: Surface blow built to
IS: No Return
FF: Surface blow started at 25 min built to 1/4"
FS: No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2356.16	113.36	Initial Hydro-static
1	34.20	113.02	Open To Flow (1)
62	38.44	115.18	Shut-In(1)
105	99.17	115.77	End Shut-In(1)
105	39.11	115.88	Open To Flow (2)
151	39.02	116.34	Shut-In(2)
209	110.58	116.97	End Shut-In(2)
210	2382.20	118.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	50' GIP	0.00
50.00	OCM 70M 30o	0.25

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hartman Oil Co

Ward #11 Twin

10500 E Berkeley Sq Pkwy
Ste 100
Wichita, KS 67206
ATTN: Charlie Sturdavant

16-22s-33w Finney, KS

Job Ticket: 041206

DST#: 2

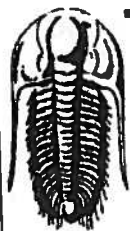
Test Start: 2011.04.24 @ 12:22:00

Tool Information

Drill Pipe:	Length: 4461.00 ft	Diameter: 3.80 inches	Volume: 62.58 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 98000.00 lb
		Total Volume:	63.76 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	4698.00 ft			Final 77000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	17.00 ft			
Tool Length:	45.00 ft			
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			4671.00	
Shut In Tool	5.00			4676.00	
Hydraulic tool	5.00			4681.00	
Jars	5.00			4686.00	
Safety Joint	3.00			4689.00	
Packer	5.00			4694.00	28.00 Bottom Of Top Packer
Packer	4.00			4698.00	
Stubb	1.00			4699.00	
Perforations	11.00			4710.00	
Recorder	0.00	8358	Outside	4710.00	
Recorder	0.00	6669	Outside	4710.00	
Bullnose	5.00			4715.00	17.00 Bottom Packers & Anchor

Total Tool Length: 45.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Hartman Oil Co

Ward #11 Twin

10500 E Berkeley Sq Pkwy
Ste 100
Wichita, KS 67206
ATTN: Charlie Sturdavant

16-22s-33w Finney, KS

Job Ticket: 041206

DST#: 2

Test Start: 2011.04.24 @ 12:22:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 58.00 sec/qt
Water Loss: 7.59 in³
Resistivity: 0.00 ohm.m
Salinity: 1600.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	50' GIP	0.000
50.00	OCM 70M 30o	0.246

Total Length: 50.00 ft Total Volume: 0.246 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

