



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1185867
OIL & GAS CONSERVATION DIVISION

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 # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- 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: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

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: _____

1185867

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

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

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> 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
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

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: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
---	--

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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TREATMENT REPORT

Customer: **Land D Exploration, LLC.** Lease No.: _____ Date: **1-12-14**
 Lease: **Fisher** Well # **1**
 Field Order #: **4839** Station: **Pratt, Kansas** Casing: **8 7/8" 23Lb.** Depth: **679 Feet** County: **Stafford** State: **Kansas**
 Type Job: **C.N.W. - Surface** Formation: _____ Legal Description: **21-255-12W**

PIPE DATA		PERFORATING DATA		CEMENT USED		TREATMENT RESUME		
Casing Size: 8 7/8"	Tubing Size: 2 3/8"	Shots/Ft: 175	sacks: 175	Blend with: A Con Blend with 12Lb./Gal.	Rate: 38	Press: Calcium Chloride	ISIP: 25	Cell Plate: 25 Lb./st. cell plate
Depth: 679 Feet	Depth: 679 Feet	From: _____	To: _____	Common Cement with: 2 1/2	Max: 14.49	Gal/stk: 2.47	5 Min. CU. FT. / st.	
Volume: 43.5 Bbl.	Volume: 43.5 Bbl.	From: 150	sacks: Common	Min: 15.6	Avg: 5.23	Gal/stk: 1.20	15 Min. CU. FT. / st.	
Max Press: 350 P.S.I.	Max Press: 350 P.S.I.	From: _____	To: _____	Flush: 40.7 Bbl. Fresh Water	HHP Used: _____		Annulus Pressure	
Well Connection: Plug container	Annulus Vol.: _____	From: _____	To: _____		Gas Volume: _____		Total Load	
Plug Depth: 640 Feet	Packer Depth: _____	From: _____	To: _____					

Customer Representative: **Wess** Station Manager: **Kevin Gordley** Treater: **Clarence R. Messicht**

Service Units	37216	77,686	19,905	70,959	19,918				
Driver Names	Messicht	Mc Graw	Namby						

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
4:30					Trucks on location and hold safety meeting.
6:00					Southwind Drilling start to run 16 Joints used Limited Service 23Lb./Ft. 8 7/8" cs
7:30					Casing in well. Circulate for 5 minutes
7:45	250			5	Start Fresh water Pre-Flush.
	275		10	6	Start mixing 175 sacks A Con Blend cemen
	175		87	5	start mixing 150 sacks Common Cement.
	-0-		119		Stoppumping. Shut in well. Release Top Rubber Plug. Open well.
8:15	150			5	Start Fresh water Displacement.
8:30	350		40.7		Plug down. Shut in well.
					Open Release. No returns.
					Wash up pump truck
9:00					Job Complete.
					Thank You.
					Clarence, Milte, Jerry
					Cost - 10 bbl cement to 8 7/8"

TREATMENT REPORT

Customer HFO EXPLORATION LLC	Lease No.	Date 1-21-14
Lease Kisher	Well # 1	
Field Order # 9647	Station Pratt	Casing 5 1/2
Type Job CNW LS	Formation	Depth 4223
		County STAFFORD
		State KS
		Legal Description 21-25-12

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME	
Casing Size 5 1/2	Tubing Size	Shots/Ft		AGG 200 SKS 60/40 PZ	RATE	PRESS	ISIP
Depth 4223	Depth	From	To	Pre Pad .75% CR	Max 5# SK	5# PERFORM	18% SALT
Volume 100.5	Volume	From	To	Pad	Min		10 Min.
Max Press 1500	Max Press	From	To	Frac	Avg		15 Min.
Well Connection PC	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth 4200.89	Packer Depth	From	To	Flush 100	Gas Volume		Total Load

Customer Representative GERRAIN	Station Manager Kevin Gossley	Treater MIKE MATTAJ
Service Units 37586	33708 20920	19851 19862
Driver Names MATTAJ	Kuemin	HANSON

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
8:15					ON LOCATION / SAFETY MEETING
9:20					RUN 5 1/2 15.5# CSNG BASKET ON #2
					TUBES ON 1, 3, 5, 7, 9, 11, 13, 15
10:55					CSNG ON BOTTOM
11:15					HOOD UP TO CSNG / BREAK CIRC W RIG
12:34	50		20	4	PUMP 20 BBLs 2% KCl WATER
12:39	50		12	5	PUMP 12 BBL MUD FLUSH
12:41	50		3	5	PUMP 3 BBL WATER
12:43	300		44	5	MIX 200 SKS 60/40 PZ
12:51	-		4	3	WASH PUMP + LINES
12:56	-		-	-	RELEASE PLUG
12:57	50		-	6	START DISPLACEMENT
1:11	300		79	5	LIFT CEMENT
1:13	400		79 90	4.5	SLOW RATE
1:17	900/1400				PLUG DOWN, PSI TO 1400 RELEASE + HOLD
					CIRC THRU JOB
1:25			7		PLUG RETURN
					JOB COMPLETE
					THANK YOU!
					MIKE MATTAJ

MORNING DRILLING REPORT
For: H&D Exploration, LLC

SOUTHWIND DRILLING, INC.
RIG No. 6

Well Name: Fisher #1
Location: 330' FNL & 330' FEL
Section: 21-25S-12W
County: Stafford
API: 15-185-23851-00-00

Elevation: GL 1860'
KB 1868'
Est. TD: 4300'
Conductor: N/A

Rig No. 6 (Pusher Wes Pfaff) 620 566-7094
Rig No. 6 (Doghouse) 620 566-7150
Southwind Drilling Office 620 564-3800



Surface Casing: Ran 16 joints of new 2 3/8", 8 5/8" casing, Tally @ 670', Set @ 680', used 325 sacks total, 175 sacks of Acon, 3% cc 25# cell-flake, 150 sacks of Common, 3% cc, 25# cell-flake, cement circulated, by Basic (Ticket #1718), plug down @ 8:30 am on 01.12.14.

Production Info: Ran 94 joints of new 15.6#, 5 1/2" casing, Tally @ 4208', Set @ 4217', used 200 sacks of 60/40 Poz, 25% Defoamer, 18% salt, 75% CFR, 5# Gilsomite, 30 sacks of 60/40 Poz, 2% gel, cemented, by Basic (Ticket #9647), job complete @ 1:15 pm on 01.21.14.

Rotary Total Depth: 4225'
Log Total Depth: 4223' Geologist: Jim Musgrove

7:00 A.M. Depth: 4225'		7:00 A.M. Current Operation: TEAR DOWN										Total
Spud Date & Time:	01/11/14 Day 1	01/12/14 Day 2	01/13/14 Day 3	01/14/14 Day 4	01/15/14 Day 5	01/16/14 Day 6	01/17/14 Day 7	01/18/14 Day 8	01/19/14 Day 9	01/20/14 Day 10	01/21/14 Day 11	Total
Total Depth (7:00am)	0	680	1400	2490	3260	3610	3800	3855	4028	4130	4225	4225
Daily Progress	880	720	1090	770	350	190	55	173	102	95		4225
Fl. Per Hr.	97.14	106.67	53.17	36.24	29.79	17.67	18.33	22.32	21.47	18.10	#DIV/0!	42.78
Current Operation (7:00am)	Rig Up	Run Casing	Drilling	Drilling	Drilling	TOWT	TOWT	DST #3	DST #4	TWVB	LDDP	
Formation	Surface	Surface	Sand / Shale	Shale	Shale	Lansing "B"	Lansing "J"	Lansing "K"	Mississippi	Simpson	Arbuckle	
Fuel Used	212.75	237.58	187.87	466.62	316.48	279.53	210.50	310.13	227.64	228.94	91.21	2969.25
Survey (degree & depth)	1' @ 680'				1' @ 3610'						1' @ 4225'	
Mud Info												
Mud Cost	\$0.00	\$1,277.00	\$3,115.75	\$2,063.80	\$322.55	-\$7.45	\$0.00	\$1,605.00	\$278.60	\$1,345.70		\$10,001.85
Weight (# / Gal)	10.2	8.2	9.8	8.9	9.2	9.3	9.3	9.3	9.1	9.1		
Vls (Funnel)	38	26	29	70	67	58	54	55	53	50		
Water Loss (cc)				6.8	6.8	6.8	14.2	10.2	12.4	13.2		
Bit #1												
Bit Make / Type	JZ Teeth											
Bit Size	12 1/4											
Bit Hours	7.00											7.00
Bit #2												
Bit Make / Type	JZ HA20Q	JZ HA20Q	JZ HA20Q	JZ HA20Q	JZ HA20Q	JZ HA20Q	JZ HA20Q	JZ HA20Q	JZ HA20Q	JZ HA20Q	JZ HA20Q	
Bit Size	7 7/8	7 7/8	7 7/8	7 7/8	7 7/8	7 7/8	7 7/8	7 7/8	7 7/8	7 7/8	7 7/8	
Bit Hours	6.75	30.50	21.25	11.75	10.75	3.00	7.75	4.75	5.25			91.75
Bit Cumulative Hours	7.00	6.75	20.50	21.25	11.75	10.75	3.00	7.75	4.75	5.25	0.00	98.75
Weight on Bit (WOB)	20,000	28,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000		
RPM	160	80	80	80	80	80	80	80	80	75		
Pump Pressure	450	650	1000	900	900	800	800	800	950	800		
Drilling (Rotating) Hours	7.00	6.75	20.50	21.25	11.75	10.75	3.00	7.75	4.75	5.25	0.00	98.75
Daywork Hrs: (Operator's time)												
Rat Hole (>75 Hrs)												0.00
Wait on Cement		12.00										12.00
Trip	1.75				5.25	6.75	6.25	6.50	10.00	5.75		42.25
Circulate	0.50				2.25	1.50	2.25	3.00	3.00	4.00		16.50
Tool					0.50	1.25	1.50	1.50	1.75	0.25		6.75
Testing					3.00	3.00	1.50	4.25	3.25			15.00
Clean Floor												0.00
Logging										4.25		4.25
LDDP / LDDC										4.00	1.00	5.00
Run Casing / Cement	1.00	1.50								4.50		7.00
Nights Down / Jet Collar												0.00
Set Slips / Jet Pils											1.25	1.25
Wait on Loggers												0.00
Wait on Orders												0.00
Billable Hours	3.25	13.50	0.00	0.00	11.00	12.50	11.50	15.25	18.00	18.25	6.75	110.00
Non-Billable Hours (Southwind's time)												
Rig Up / Rig Down	9.00										8.50	17.50
Wait on Cement (if NC)												0.00
Drill Rat Hole (<75 hrs)	0.25											0.25
Drill Plug		0.50										0.50
Circulate / Trip (Surface)	1.25											1.25
Rig Repair		0.75				0.25	3.00	0.50	1.00	0.25		5.75
Connections	2.75	2.25	2.50	1.75	1.00	0.50	0.50	0.50	0.25	0.25		12.25
Jet/Displace	0.25	0.25	1.00	1.00								2.50
Surveys	0.25				0.25							0.50
Rig Check												0.00
Circulate (NB)							1.00					1.00
Trip Time (NB)												0.00
Plugged Bit							5.00					5.00
Lost Circulation (< 2 hrs)												0.00
Lay Down Kelly / RH											0.75	0.75
Non-Billable Hrs.	13.75	3.75	3.50	2.75	1.25	0.75	9.50	1.00	1.25	0.50	9.25	47.25
Footage Cost	\$ 9,520.00	\$ 10,080.00	\$ 15,260.00	\$ 10,780.00	\$ 4,900.00	\$ 2,660.00	\$ 770.00	\$ 2,422.00	\$ 1,426.00	\$ 1,330.00	\$ -	\$ 59,150.00
Daywork Cost	\$ 1,137.50	\$ 4,725.00	\$ -	\$ -	\$ 3,850.00	\$ 4,375.00	\$ 4,025.00	\$ 5,337.50	\$ 6,300.00	\$ 6,387.50	\$ 2,362.50	\$ 38,500.00
Combined Est. Cost*	\$ 10,657.50	\$ 14,805.00	\$ 15,260.00	\$ 10,780.00	\$ 8,750.00	\$ 7,035.00	\$ 4,795.00	\$ 7,759.50	\$ 7,728.00	\$ 7,717.50	\$ 2,362.50	\$ 97,650.00

<i>*Please note that this is estimated footage & daywork cost only. Additional charges will apply on invoice (fuel surcharge, water transfer pump, etc)</i>												
DST #1 Info -			DST #2 Info -				DST #3 Info -			DST #4 Info -		
Footage Interval: 3573' - 3610' Recovery: 17" Mud			Lansing "B"				Footage Interval: 3708' - 3800' Recovery: 500' Gas in Pipe 170' Gassy Oil Spotted Mud			Footage Interval: 3801' - 3855' Recovery: 60' Gas in Pipe 15" Mud		
DST #5 Info -			DST #6 Info -									
Footage Interval: 4094' - 4130' Recovery: 2235' Water with Gas			"Simpson"				Footage Interval: Recovery:					

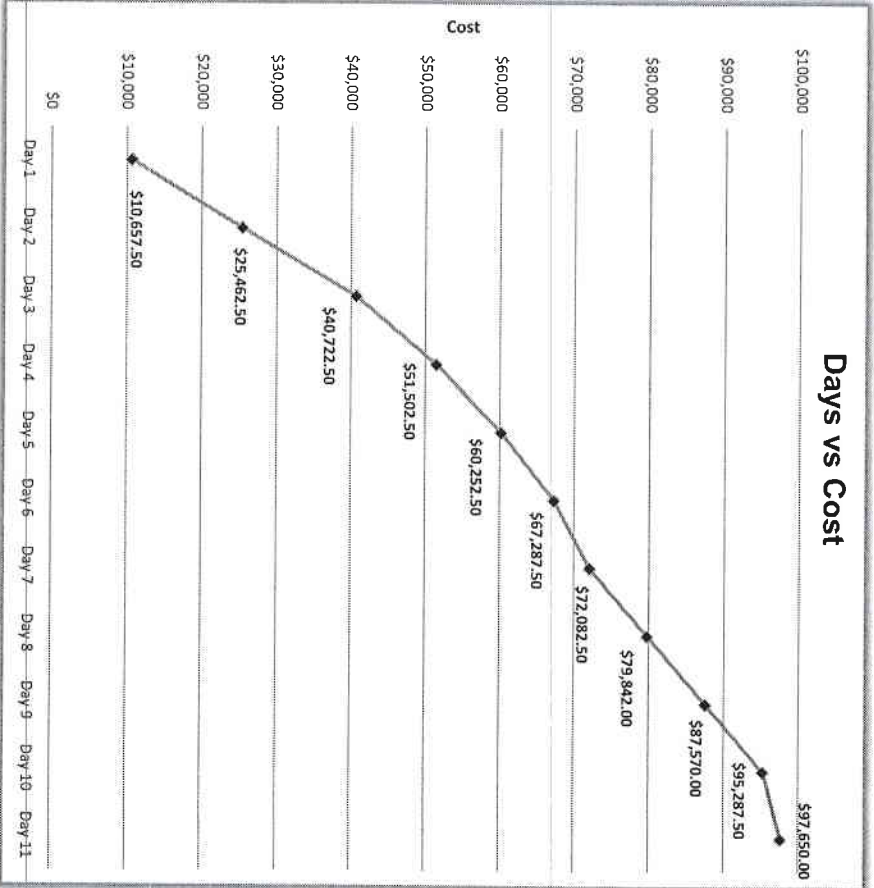
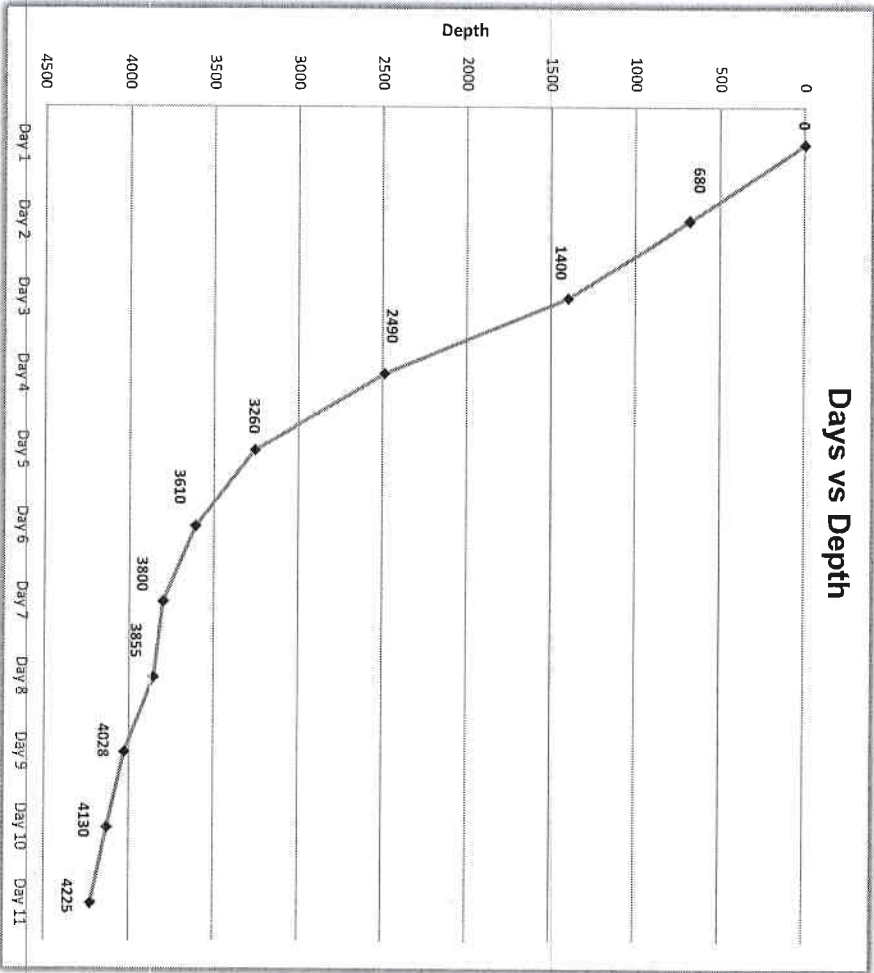
Anhydrite @ 670' - 694'

Displaced @ 2823'



Job Summary Graphical Report

Southwind Rig No. 6
Fisher #1





Diamond Testing General Report

**JAKE
FAHRENBRUCH - TESTER
Cell: (620) 282-8977**

P.O. Box 157
Hoisington KS 67544
Office: (800) 542-7313

General Information

Company Name H D Exploration, LLC
Well Operator H D Exploration, LLC
Contact Gerald Achatz
Site Contact Josh Austin
Field NA
Well Type Vertical
Prepared By Jake Fahrenbruch

Well Name
Unique Well ID DST #1 Lansing "B" 3573'-3610'
Surface Location Sec 21-25s-12w-Stafford Co.-KS
Test Unit #5
Pool NA
Job Number F229
Qualified By Josh Austin

Test Information

Test Type Bottom-Hole w/Jars & Safety Jt
Formation Lansing "B" 3573'-3610'
Start Test Date 2014/01/16
Final Test Date 2014/01/16

Test Purpose Initial Test
Gauge Name Inside 0062
Start Test Time 01:40:00
Final Test Time 08:35:00

Test Results

30 minute initial flow period: Strong blow off B.O.B. in 1.75 minutes. No G.T.S.
45 minute initial shut-in period: No blow-back.
45 minute final flow period: Strong blow off B.O.B. immediately. No G.T.S.
60 minute final shut-in period: No blow-back.

Recovered:

20' SOSM 1% oil, 99% mud
----- 1070' of Gas In Pipe
----- Bottom-Hole Temp: 109 Deg F

Pressures:

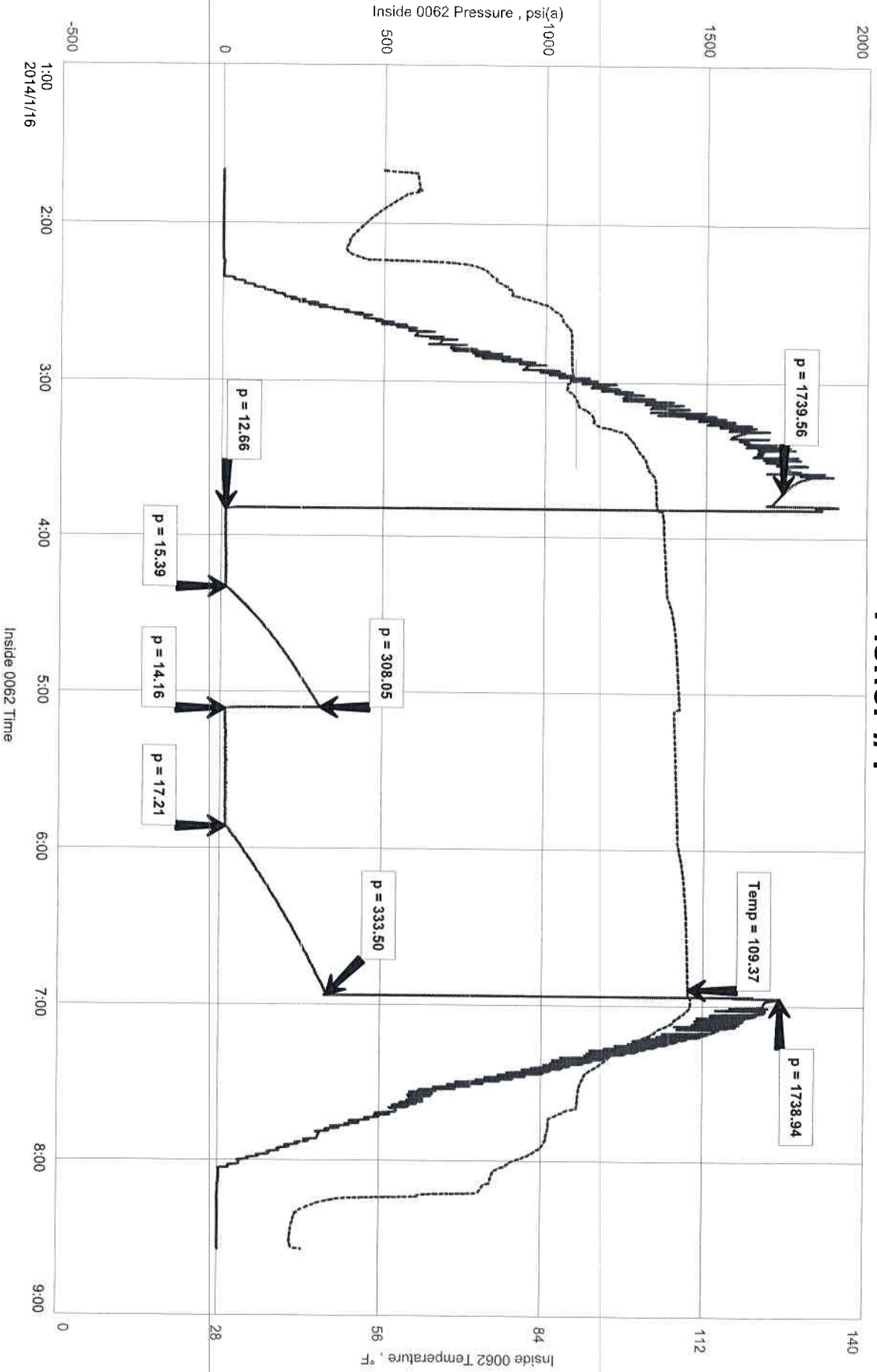
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IFP: 13-15
ISIP: 308
FFP: 14-17
FSIP: 334
FHP: 1739

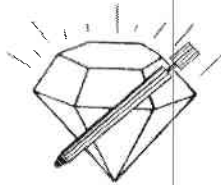
Thanks.

HD Exploration, LLC
 DST #1 Lansing "B" 3573'-3610'
 Start Test Date: 2014/01/16
 Final Test Date: 2014/01/16

Fisher #1

Fisher #1
 Formation: Lansing "B" 3573'-3610'
 Pool: NA
 Job Number: F229





DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: FISHER1DST1

TIME ON: 1:40 AM

TIME OFF: 8:35 AM

Company H D Exploration, LLC Lease & Well No. Fisher #1
Contractor Southwind Drilling Rig #6 Charge to H D Exploration, LLC
Elevation 1868' KB Formation Lansing "B" Effective Pay _____ Ft. Ticket No. F229
Date 1-16-14 Sec. 21 Twp. 25 S Range 12 W County Stafford State KANSAS
Test Approved By Josh Austin Diamond Representative Jake Fahrenbruch

Formation Test No. ONE Interval Tested from 3573 ft. to 3610 ft. Total Depth 3610 ft.
Packer Depth 3568 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 3573 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3551 ft. Recorder Number 0062 Cap. 5,000 P.S.I.
Bottom Recorder Depth (Outside) 3576 ft. Recorder Number 5951 Cap. 5,000 P.S.I.
Below Straddle Recorder Depth ---- ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chemical Viscosity 70 Drill Collar Length _____ ft. I.D. 2 1/4 in.
Weight 9.2 Water Loss 6.8 cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.
Chlorides 4900 P.P.M. Drill Pipe Length 3540 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number #5 J&J Test Tool Length 33 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 37 ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. ALL PERF Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Strong blow off B.O.B. in 1.75 minutes. No G.T.S., No blow-back.

2nd Open: Strong blow off B.O.B. immediately. No G.T.S., No blowback.

Recovered 20 ft. of SOSM 1% oil, 99% mud
Recovered _____ ft. of 1070' of Gas In Pipe
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Recovered _____ ft. of _____

Remarks: _____ Price Job _____
Other Charges _____
Insurance _____
Total _____

Time Set Packer(s) 3:50 AM A.M. P.M. Time Started Off Bottom 6:50 AM A.M. P.M. Maximum Temperature 109 Deg F
Initial Hydrostatic Pressure..... (A) 1740 P.S.I.
Initial Flow Period..... Minutes 30 (B) 13 P.S.I. to (C) 15 P.S.I.
Initial Closed In Period..... Minutes 45 (D) 308 P.S.I.
Final Flow Period..... Minutes 45 (E) 14 P.S.I. to (F) 17 P.S.I.
Final Closed In Period..... Minutes 60 (G) 334 P.S.I.
Final Hydrostatic Pressure..... (H) 1739 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



Diamond Testing General Report

**JAKE
FAHRENBRUCH - TESTER
Cell: (620) 282-8977**

P.O. Box 157
Hoisington KS 67544
Office: (800) 542-7313

General Information

Company Name H D Exploration, LLC
Well Operator H D Exploration, LLC
Contact Gerald Achatz
Site Contact Scott Alberg
Field NA
Well Type Vertical
Prepared By Jake Fahrenbruch

Well Name
Unique Well ID DST #3 Lansing "K&L" 3801'-3855'
Surface Location Sec 21-25s-12w-Stafford Co.-KS
Test Unit #5
Pool NA
Job Number F231
Qualified By Scott Alberg

Test Information

Test Type Bottom-Hole w/J&J
Formation Lansing "K&L"
Start Test Date 2014/01/18
Final Test Date 2014/01/18

Test Purpose Initial Test
Gauge Name Inside 5951
Start Test Time 03:28:00
Final Test Time 10:41:00

Test Results

30 minute initial flow period: Weak blow, built to 4".
45 minute initial shut-in period: No blow-back.
45 minute final flow period: Weak blow, built to 10".
60 minute final shut-in period: No blow-back.

Recovered:

15' Drilling Mud
----- 60' GIP
----- Bottom-Hole Temp: 105 Deg F

Pressures:

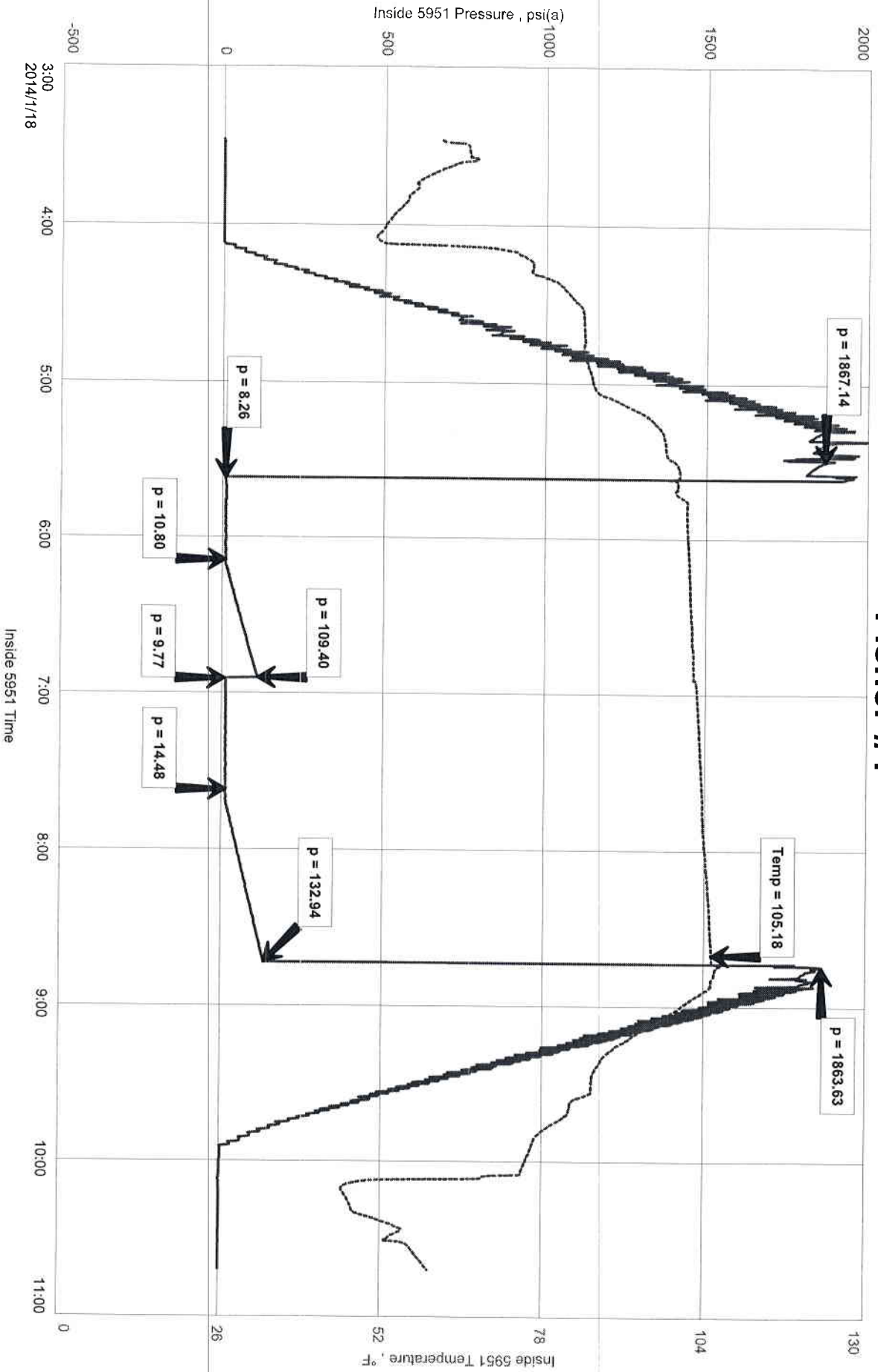
IHP: 1867
IFP: 8-11
ISIP: 109
FFP: 10-14
FSIP: 133
FHP: 1864

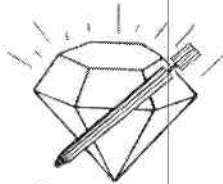
Thanks

HD Exploration, LLC
DST #3 Lansing "K&L" 3801'-3855'
Start Test Date: 2014/01/18
Final Test Date: 2014/01/18

Fisher #1

Fisher #1
Formation: Lansing "K&L"
Pool: NA
Job Number: F231





DIAMOND TESTING
 P.O. Box 157
HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: FISHER1DST3

TIME ON: 3:28 AM

TIME OFF: 10:41 AM

Company H D Exploration, LLC

Lease & Well No. Fisher #1

Contractor Southwind Drilling

Rig #6

Charge to H D Exploration, LLC

Elevation 1868' KB

Formation Lansing "K&L"

Effective Pay _____

Ft. Ticket No. F231

Date 1-18-14 Sec. 21

Twp. 25 S

Range 12 W

County Stafford

State KANSAS

Test Approved By Scott Alberg

Diamond Representative _____

Jake Fahrenbruch

Formation Test No. Three Interval Tested from 3801 ft. to 3855 ft. Total Depth 3855 ft.

Packer Depth 3796 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Packer Depth 3801 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3779 ft. Recorder Number 5951 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 3780 ft. Recorder Number 0062 Cap. 5,000 P.S.I.

Below Straddle Recorder Depth ---- ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chemical Viscosity 54 Drill Collar Length _____ ft. I.D. 2 1/4 in.

Weight 9.2 Water Loss 14.2 cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.

Chlorides 10,400 P.P.M. Drill Pipe Length 3768 ft. I.D. 3 1/2 in.

Jars: Make STERLING Serial Number #5 J&J Test Tool Length 33 ft. Tool Size 3 1/2-IF in.

Did Well Flow? NO Reversed Out NO Anchor Length 54 ft. Size 4 1/2-FH in.

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. 20' PERF (2 TOP, 18 BTM) Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Weak blow, built to 4". No blow-back.

2nd Open: Weak blow, built to 10". No blow-back.

Recovered 15 ft. of Drilling Mud

Recovered _____ ft. of 60' GIP

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Remarks: _____

Price Job

Other Charges

Insurance

Total

Time Set Packer(s) 5:36 A.M. P.M. Time Started Off Bottom 8:36 A.M. P.M. Maximum Temperature 105 Deg F

Initial Hydrostatic Pressure..... (A) 1867 P.S.I.

Initial Flow Period..... Minutes 30 (B) 8 P.S.I. to (C) 11 P.S.I.

Initial Closed In Period..... Minutes 45 (D) 109 P.S.I.

Final Flow Period..... Minutes 45 (E) 10 P.S.I. to (F) 14 P.S.I.

Final Closed In Period..... Minutes 60 (G) 133 P.S.I.

Final Hydrostatic Pressure..... (H) 1864 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



Diamond Testing General Report

**JAKE
FAHRENBRUCH - TESTER
Cell: (620) 282-8977**

P.O. Box 157
Hoisington KS 67544
Office: (800) 542-7313

General Information

Company Name H D Exploration, LLC
Well Operator H D Exploration, LLC
Contact Gerald Achatz
Site Contact Josh Austin
Field NA
Well Type Vertical
Prepared By Jake Fahrenbruch

Well Name Fisher #1
Unique Well ID DST #2 Lansing "H,I,J" 3708'-3800'
Surface Location Sec 21-25s-12w-Stafford Co.-KS
Test Unit #5
Pool NA
Job Number F230
Qualified By Josh Austin

Test Information

Test Type Bottom-Hole w/J&J
Formation Lansing "H,I,J" 3708'-3800'
Start Test Date 2014/01/17
Final Test Date 2014/01/17

Test Purpose Initial Test
Gauge Name Inside 5951
Start Test Time 00:58:00
Final Test Time 08:44:00

Test Results

30 minute initial flow period: Fairly strong blow, built to B.O.B. in 15 minutes.
45 minute initial shut-in period: No blow-back.
45 minute final flow period: Fairly strong blow, built to B.O.B. in 10 minutes.
60 minute final shut-in period: Blow-back built to 1.5".

Recovered:

170' Gassy Oil Specked Mud 25% gas, 2% oil, 73% mud
----- 500' Gas In Pipe
----- Bottom-Hole Temp: 110 Deg F

Pressures:

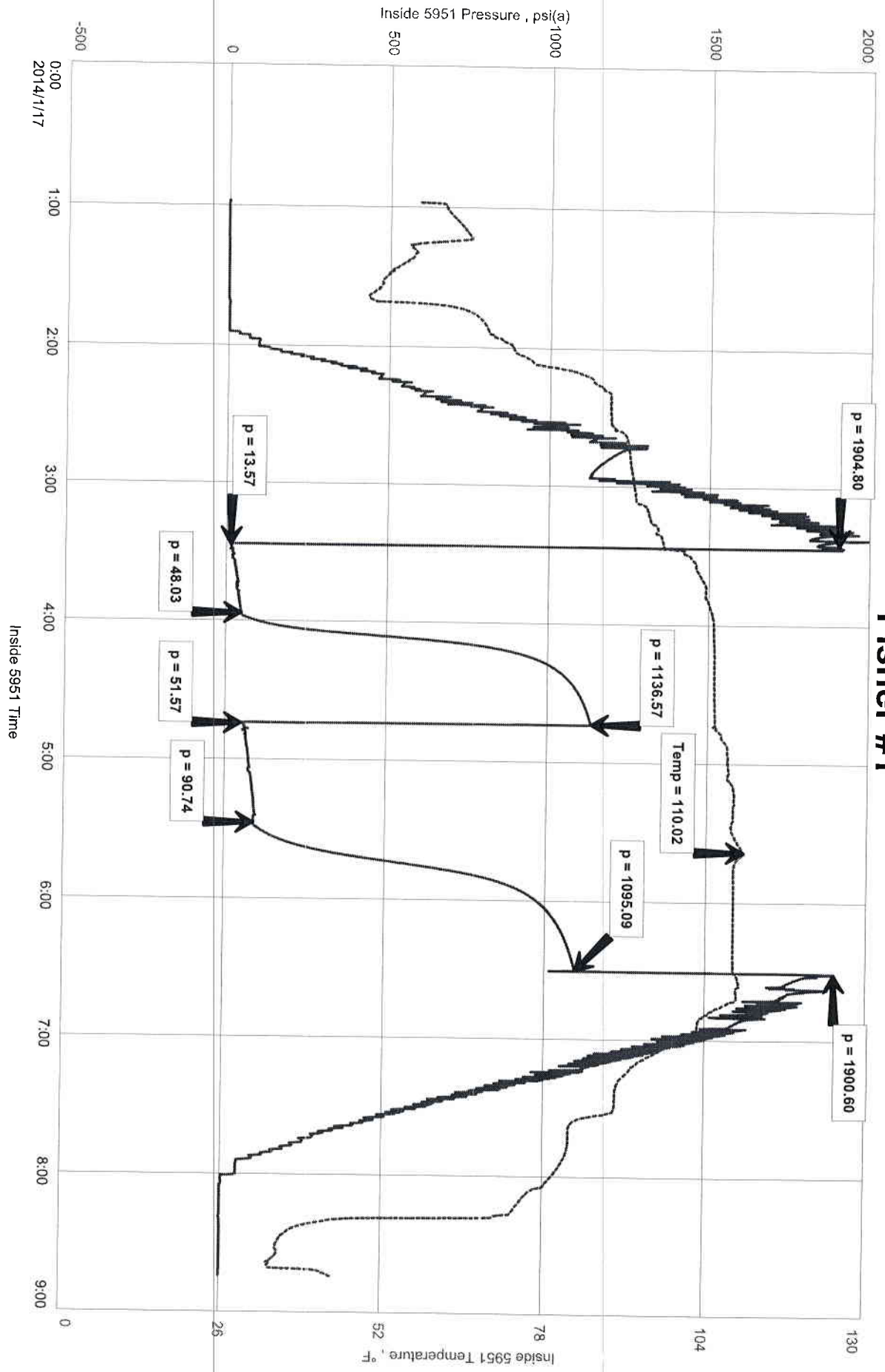
IHP: 1905
IFP: 14-48
ISIP: 1137
FFP: 52-91
FSIP: 1095
FHP: 1901

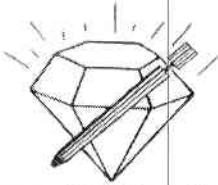
Thanks.

H D Exploration, LLC
DST #2 Lansing "H,I,J" 3708-3800'
Start Test Date: 2014/01/17
Final Test Date: 2014/01/17

Fisher #1

Fisher #1
Formation: Lansing "H,I,J" 3708-3800'
Pool: NA
Job Number: F230





DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: FISHER1DST2

TIME ON: 12:58 AM

TIME OFF: 8:44 AM

Company H D Exploration, LLC Lease & Well No. Fisher #1
Contractor Southwind Drilling Rig #6 Charge to H D Exploration, LLC
Elevation 1868' KB Formation Lansing "H,I,J" Effective Pay _____ Ft. Ticket No. F230
Date 1-17-14 Sec. 21 Twp. 25 S Range 12 W County Stafford State KANSAS
Test Approved By Josh Austin Diamond Representative Jake Fahrenbruch

Formation Test No. TWO Interval Tested from 3708 ft. to 3800 ft. Total Depth 3800 ft.
Packer Depth 3703 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 3708 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3686 ft. Recorder Number 5951 Cap. 5,000 P.S.I.
Bottom Recorder Depth (Outside) 3687 ft. Recorder Number 0062 Cap. 5,000 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.
Mud Type Chemical Viscosity 58 Drill Collar Length _____ ft. I.D. 2 1/4 in.
Weight 9.3 Water Loss 8.8 cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.
Chlorides 7700 P.P.M. Drill Pipe Length 3675 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number #5 J&J Test Tool Length 33 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 92 ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. ^{26' PERF (2'TOP, 24'BTM)} Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Fairly strong blow, built to B.O.B. in 15 minutes. No blow-back.

2nd Open: Fairly strong blow, built to B.O.B. in 10 minutes. Blow-back built to 1.5".

Recovered 170 ft. of Gassy Oil Specked Mud 25% gas, 2% oil, 73% mud
Recovered _____ ft. of 500' Gas In Pipe
Recovered _____ ft. of _____
Recovered _____ ft. of _____

Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: _____	Insurance
_____	Total

Time Set Packer(s) 3:25 AM A.M. P.M. Time Started Off Bottom 6:25 AM A.M. P.M. Maximum Temperature 110 Deg F

Initial Hydrostatic Pressure..... (A) 1905 P.S.I.
Initial Flow Period..... Minutes 30 (B) 14 P.S.I. to (C) 48 P.S.I.
Initial Closed In Period..... Minutes 45 (D) 1137 P.S.I.
Final Flow Period..... Minutes 45 (E) 52 P.S.I. to (F) 91 P.S.I.
Final Closed In Period..... Minutes 60 (G) 1095 P.S.I.
Final Hydrostatic Pressure..... (H) 1901 P.S.I.

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Diamond Testing General Report

**JAKE
FAHRENBRUCH - TESTER
Cell: (620) 282-8977**

P.O. Box 157
Hoisington KS 67544
Office: (800) 542-7313

General Information

Company Name HD Exploration LLC
Well Operator HD Exploration LLC
Contact Gerald Achatz
Site Contact Scott Alberg
Field NA
Well Type Vertical
Prepared By Jake Fahrenbruch

Well Name
Unique Well ID DST #5 Simpson 4094'-4130'
Surface Location Sec 21-25s-12w-Stafford Co.-KS
Test Unit #5
Pool NA
Job Number F233
Qualified By Scott Alberg

Test Information

Test Type Bottom-Hole w/J&J
Formation Simpson 4094'-4130'
Start Test Date 2014/01/19
Final Test Date 2014/01/20

Test Purpose Initial Test
Gauge Name Inside 5951
Start Test Time 23:17:00
Final Test Time 07:30:00

Test Results

30 minute initial flow period: Strong blow @ BOB in 1 minute.
45 minute initial shut-in period: Weak blowback @ .5".
30 minute final flow period: Strong blow @ BOB in 2 minutes.
60 minute final shut-in period: No blowback.

Recovered:

380' MCW 85% wtr, 15% mud
1855' Water 100% wtr
----- Total Recovered Fluid: 2235' ----- (31.74 BBL)
----- Chlorides: 28,000 PPM
----- RW: .28 ohm @ 32 Deg F
----- PH: 7.5
----- Bottom-Hole Temp: 126 Deg F

Pressures:

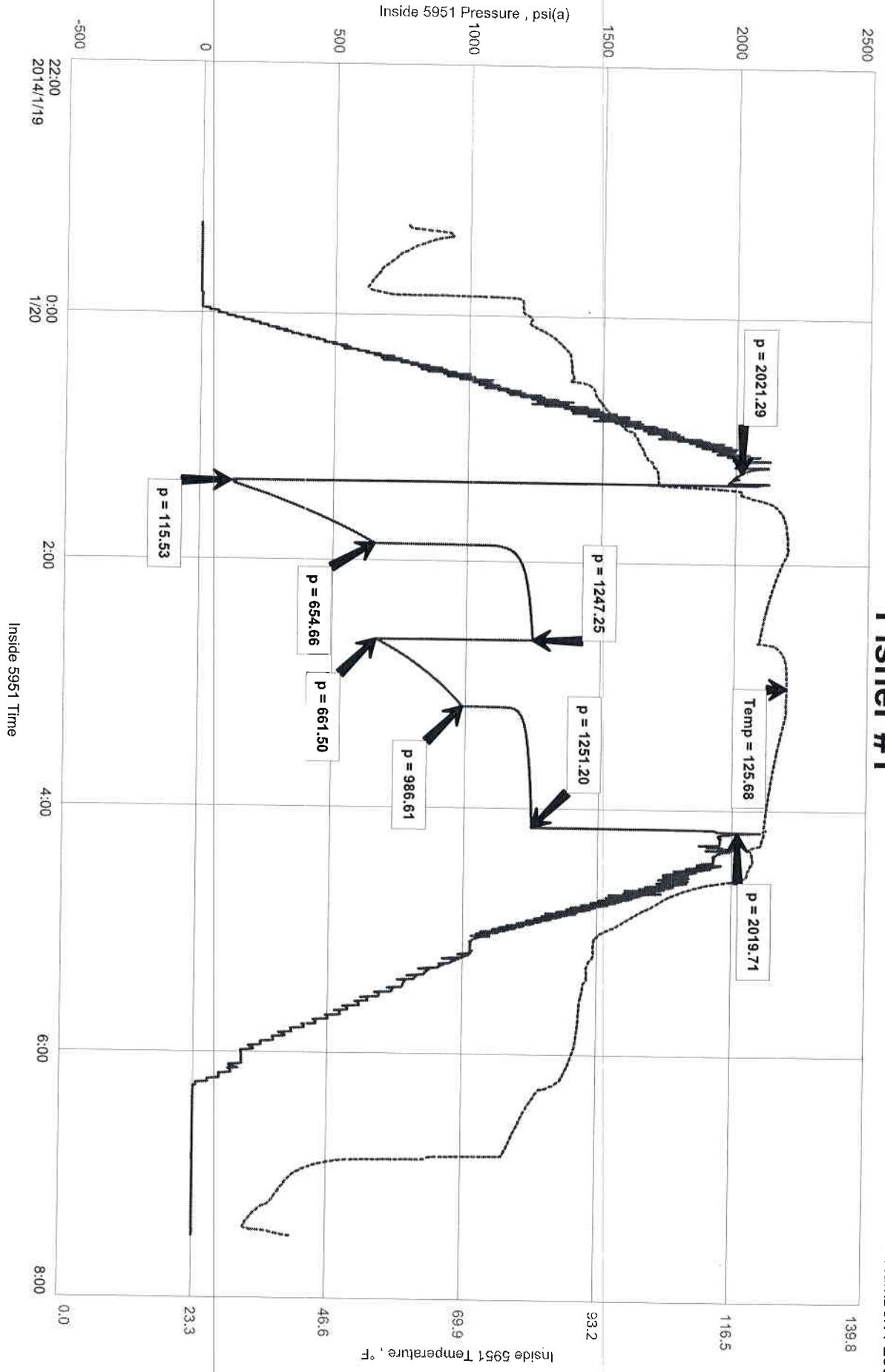
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IFP: 116 - 655
ISIP: 1247
FFP: 662 - 987
FSIP: 1251
FHP: 2020

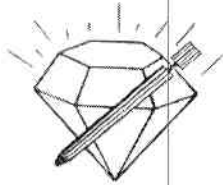
Thanks!

HD Exploration LLC
 DST #5 Simpson 4094'-4130'
 Start Test Date: 2014/01/19
 Final Test Date: 2014/01/20

Fisher #1

Fisher #1
 Formation: Simpson 4094'-4130'
 Pool: NA
 Job Number: F233





DIAMOND TESTING
 P.O. Box 157
 HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: FISHER1DST5

TIME ON: 11:17 PM 1-19
 TIME OFF: 7:30 AM 1-20

Company H D Exploration, LLC Lease & Well No. Fisher #1
 Contractor Southwind Drilling Rig #6 Charge to H D Exploration, LLC
 Elevation 1868' KB Formation Simpson Effective Pay _____ Ft. Ticket No. F233
 Date 1-20-14 Sec. 21 Twp. 25 S Range 12 W County Stafford State KANSAS
 Test Approved By Scott Alberg Diamond Representative Jake Fahrenbruch

Formation Test No. FIVE Interval Tested from 4094 ft. to 4130 ft. Total Depth 4130 ft.
 Packer Depth 4089 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
 Packer Depth 4094 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
 Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4072 ft. Recorder Number 5951 Cap. 5,000 P.S.I.
 Bottom Recorder Depth (Outside) 4073 ft. Recorder Number 0062 Cap. 5,000 P.S.I.
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.
 Mud Type Chemical Viscosity 53 Drill Collar Length _____ ft. I.D. 2 1/4 in.
 Weight 9.1 Water Loss 12.4 cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.
 Chlorides 12,500 P.P.M. Drill Pipe Length 4061 ft. I.D. 3 1/2 in.
 Jars: Make STERLING Serial Number #5 J&J Test Tool Length 33 ft. Tool Size 3 1/2-IF in.
 Did Well Flow? NO Reversed Out NO Anchor Length 36 ft. Size 4 1/2-FH in.
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Strong blow @ BOB in 1 minute. Weak blowback @ .5".

2nd Open: Strong blow @ BOB in 2 minutes. No blowback.

Recovered 380 ft. of MCW 85% wtr, 15% mud
 Recovered 1855 ft. of Water 100% wtr
 Recovered _____ ft. of Total Recovered Fluid: 2235' (31.74 BBL)
 Recovered _____ ft. of Chlorides: 28,000 PPM
 Recovered _____ ft. of RW: .28 ohm @ 32 Deg F
 Recovered _____ ft. of PH: 7.5

Remarks:

Price Job
Other Charges
Insurance
Total

Time Set Packer(s) 1:23 AM A.M. P.M. Time Started Off Bottom 4:08 AM A.M. P.M. Maximum Temperature 126 Deg F
 Initial Hydrostatic Pressure..... (A) 2021 P.S.I.
 Initial Flow Period..... Minutes 30 (B) 116 P.S.I. to (C) 655 P.S.I.
 Initial Closed In Period..... Minutes 45 (D) 1247 P.S.I.
 Final Flow Period..... Minutes 30 (E) 662 P.S.I. to (F) 987 P.S.I.
 Final Closed In Period..... Minutes 60 (G) 1251 P.S.I.
 Final Hydrostatic Pressure..... (H) 2020 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



Diamond Testing General Report

**JAKE
FAHRENBRUCH - TESTER
Cell: (620) 282-8977**

P.O. Box 157
Hoisington KS 67544
Office: (800) 542-7313

General Information

Company Name H D Exploration, LLC
Well Operator H D Exploration, LLC
Contact Gerald Achatz
Site Contact Scott Alberg
Field NA
Well Type Vertical
Prepared By Jake Fahrenbruch

Well Name
Unique Well ID DST #4 Mississippian 3966'-4028'
Surface Location Sec 21-25s-12w-Stafford Co.-KS
Test Unit #5
Pool NA
Job Number F232
Qualified By Scott Alberg

Test Information

Test Type Bottom-Hole w/J&J
Formation Mississippi 3966'-4028'
Start Test Date 2014/01/19
Final Test Date 2014/01/19

Test Purpose Initial Test
Gauge Name Inside 5951
Start Test Time 02:05:00
Final Test Time 11:12:00

Test Results

30 minute initial flow period: Strong blow at B.O.B. in 30 seconds, G.T.S. in 13 minutes.
45 minute initial shut-in period: Bled off pressure, blowback increased to B.O.B. in 10 minutes.
45 minute final flow period: Gauge gas, pressure decreased from 10 psi to 3 psi.
60 minute final shut-in period: Bled off pressure, blowback increased to B.O.B in 4 minutes.

Gas Flow Rates:	Initial flow	Choke	PSI	CF/D
	13 minutes	.25"	33	66,200
	20 minutes	.25"	37.5	72,900
	30 minutes	.25"	37.5	72,900
	Final Flow	Choke	PSI	CF/D
	10 minutes	.25"	10	30,800
	20 minutes	.25"	8	27,000
	30 minutes	.25"	6	22,900
	40 minutes	.25"	4	18,500
	45 minutes	.25"	3	15,700

Recovered: 240' ----- Gassy SOC MCW ----- 25% gas, 5% oil, 20% wtr, 50% mud
 240' ----- GC M&OCW ----- 15% gas, 20% oil, 50% wtr, 15% mud
 530' ----- GC M&OCW ----- 10% gas, 15% oil, 65% wtr, 15% mud
 190' ----- SGC Water ----- 5% gas, -----, 95% wtr, -----
 ----- 1200' Total fluid Recovered.
 ----- Chlorides: 33,000 ppm
 ----- RW: .145 ohm @ 58 deg F
 ----- PH: 7
 ----- Bottom-Hole Temp: 121 deg F

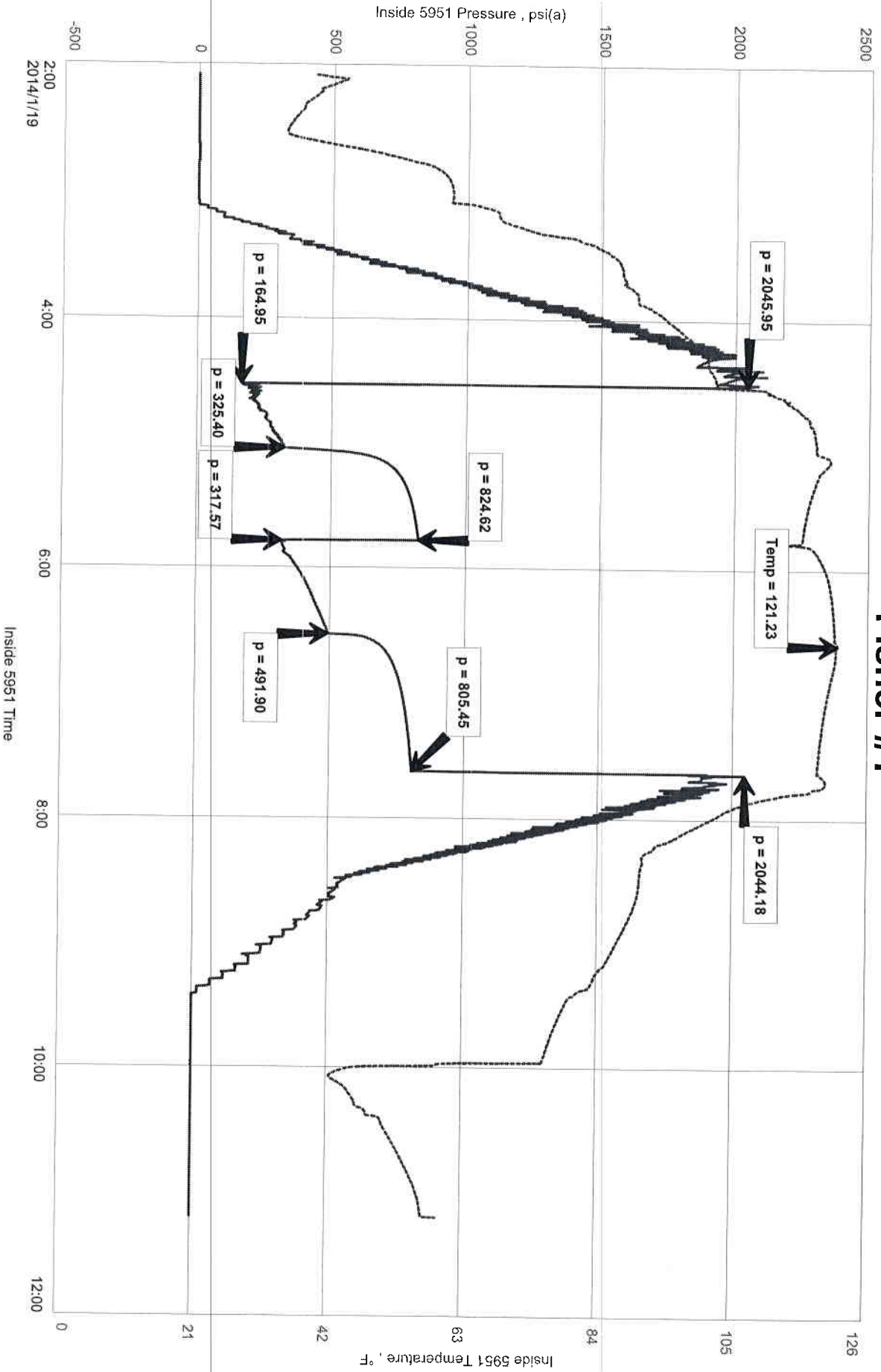
Pressures: IHP: 2046
IFP: 165 - 325
ISIP: 825
FFP: 318 - 492
FSIP: 805
FHP: 2044

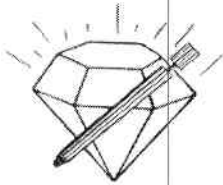
Thanks!

HD Exploration, LLC
 DST #4 Mississippi 3966' 4028'
 Start Test Date: 2014/01/19
 Final Test Date: 2014/01/19

Fisher #1

Fisher #1
 Formation: Mississippi 3966'-4028'
 Pool: NA
 Job Number: F232





DIAMOND TESTING
 P.O. Box 157
 HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: FISHER1DST4

TIME ON: 2:05 AM

TIME OFF: 11:12 AM

Company H D Exploration, LLC

Lease & Well No. Fisher #1

Contractor Southwind Drilling

Rig #6

Charge to H D Exploration, LLC

Elevation 1868' KB

Formation

Mississippi

Effective Pay

Ft. Ticket No.

F232

Date 1-19-14 Sec. 21

Twp. 25 S

Range 12 W

County Stafford

State KANSAS

Test Approved By Scott Alberg

Diamond Representative

Jake Fahrenbruch

Formation Test No. FOUR Interval Tested from 3966 ft. to 4028 ft. Total Depth 4028 ft.

Packer Depth 3961 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Packer Depth 3966 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3944 ft. Recorder Number 5951 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 3945 ft. Recorder Number 0062 Cap. 5,000 P.S.I.

Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chemical Viscosity 55 Drill Collar Length _____ ft. I.D. 2 1/4 in.

Weight 9.3 Water Loss 10.2 cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.

Chlorides 11,000 P.P.M. Drill Pipe Length 4033 ft. I.D. 3 1/2 in.

Jars: Make STERLING Serial Number #5 J&J Test Tool Length 33 ft. Tool Size 3 1/2-IF in.

Did Well Flow? **G.T.S** Reversed Out NO Anchor Length 62 ft. Size 4 1/2-FH in.

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Strong blow @ B.O.B. in 30 seconds, G.T.S. in 13 minutes. Blowback @ B.O.B.

2nd Open: Guage gas. Decreased from 10 psi to 3 psi on .25" choke. Strong blowback @ B.O.B.

Recovered 240 ft. of Gassy SOC MCW 25% gas, 5% oil, 20% wtr, 50% mud

Recovered 240 ft. of GC M&OCW 15% gas, 20% oil, 50% wtr, 15% mud

Recovered 530 ft. of HC M&OCW 10% gas, 15% oil, 65% wtr, 15% mud

Recovered 190 ft. of SGCW 5% gas, ----- 95% wtr -----

Recovered _____ ft. of Total Recovered Fluid: 1200'

Recovered _____ ft. of _____

Remarks: Chlorides: 33,000 PPM

RW: .145 ohm @ 58 deg F

PH: 7

Price Job

Other Charges

Insurance

Total

Time Set Packer(s) 4:30 AM A.M. P.M. Time Started Off Bottom 7:30 AM A.M. P.M. Maximum Temperature 121 Deg F

Initial Hydrostatic Pressure..... (A) 2046 P.S.I.

Initial Flow Period..... Minutes 30 (B) 165 P.S.I. to (C) 325 P.S.I.

Initial Closed In Period..... Minutes 45 (D) 825 P.S.I.

Final Flow Period..... Minutes 45 (E) 318 P.S.I. to (F) 492 P.S.I.

Final Closed In Period..... Minutes 60 (G) 805 P.S.I.

Final Hydrostatic Pressure..... (H) 2044 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



Diamond Testing General Report

**JAKE
FAHRENBRUCH - TESTER
Cell: (620) 282-8977**

P.O. Box 157
Hoisington KS 67544
Office: (800) 542-7313

General Information

Company Name HD Exploration LLC
Well Operator HD Exploration LLC
Contact Gerald Achatz
Site Contact Josh Austin
Field NA
Well Type Vertical
Prepared By

Well Name Hearn-Debes Unit #1
Unique Well ID DST #2 Lansing "K&L" 3745'-3810'
Surface Location Sec 3-25s-12w-Stafford Co.-KS
Test Unit #5
Pool NA
Job Number
Qualified By

Test Information

Test Type Bottom-Hole w/no special equip.
Formation Lansing "K&L" 3745'-3810'
Start Test Date 2014/01/30
Final Test Date 2014/01/30

Test Purpose Initial Test
Gauge Name Outside 5584
Start Test Time 06:18:00
Final Test Time 13:15:00

Test Results

30 minute initial flow period: Strong blow @ BOB in 30 seconds. GTS 18 minutes.
45 minute initial shut-in period: Bled off, no blowback.
45 minute final flow period: Strong blow @ BOB immediately. Guaged gas.
60 minute final shut-in period: Bled off, strong blowback.

Recovered:

370' Very Gassy HOCM 50% gas, 17% oil, 33% mud
125' Very Gassy HMCO 45% gas, 35% oil, 20% mud
----- Total Fluid Recovered: 495'
----- Maximum Gas Flow Rate: 45,500 CF/D
----- Gas In Pipe: 3225'
----- Bottom-Hole Temp: 108 Deg F

Pressures:

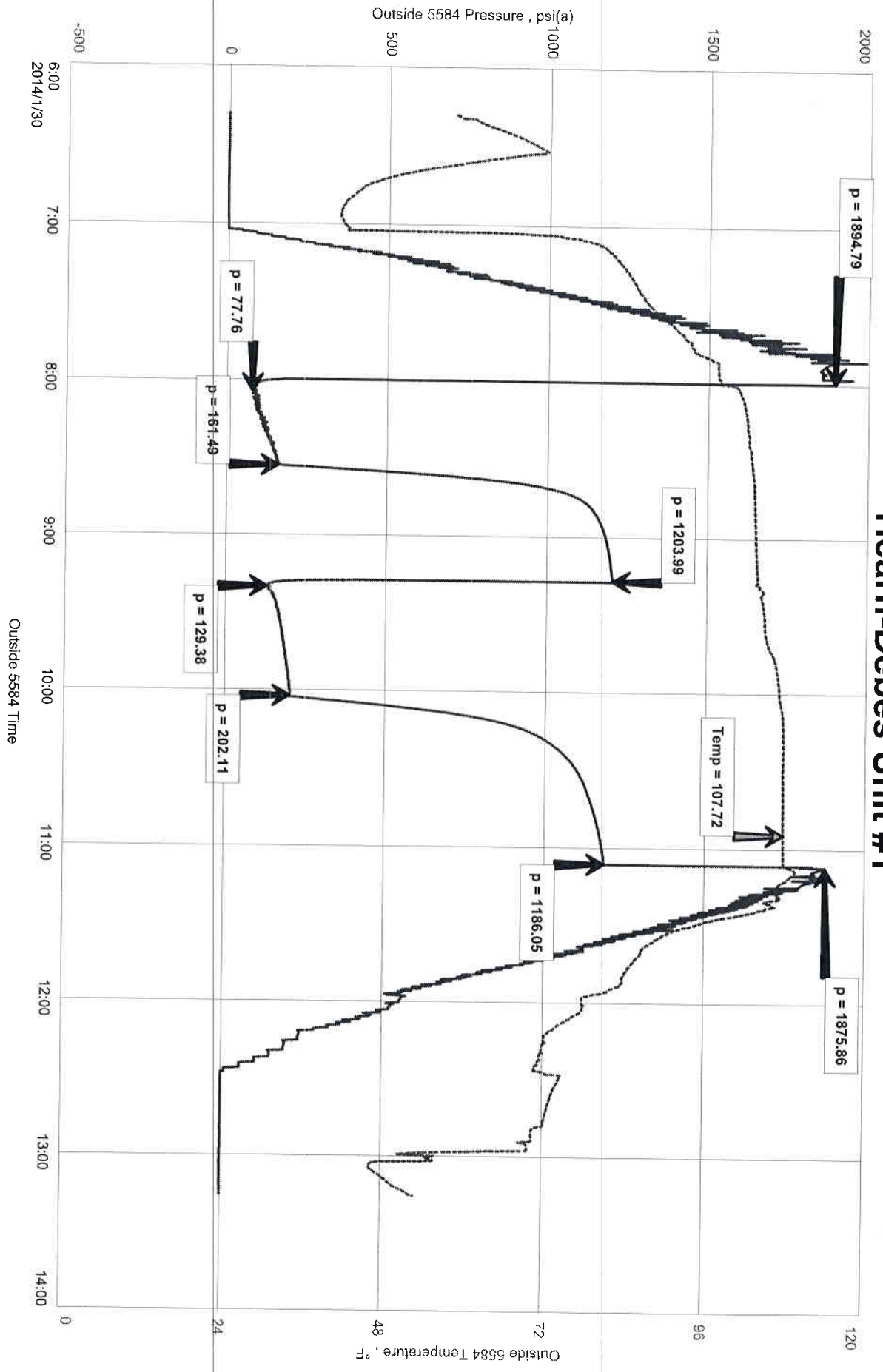
IHP: 1895
IFP: 79-161
ISIP: 1204
FFP: 129-202
FSIP: 1186
FHP: 1876

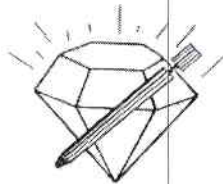
Thanks

HD Exploration LLC
 DST #2 Lansing "K&L" 3745'-3810'
 Start Test Date: 2014/01/30
 Final Test Date: 2014/01/30

Hearn-Debes Unit #1

Hearn-Debes Unit #1
 Formation: Lansing "K&L" 3745'-3810'
 Pool: NA





DIAMOND TESTING
 P.O. Box 157
 HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: HDU1DST2

TIME ON: 6:18 AM

TIME OFF: 1:15 PM

Company HD Exploration LLC

Lease & Well No. Hearn-Debes Unit #1

Contractor Southwind Drilling

Rig #6

Charge to HD Exploration LLC

Elevation 1876' KB

Formation

Lansing "K&L"

Effective Pay

----- Ft. Ticket No.

F238

Date 1-30-14 Sec. 3

Twp. 25 S

Range

12 W County

Stafford

State

KANSAS

Test Approved By Josh Austin

Diamond Representative

Jake Fahrenbruch

Formation Test No. TWO Interval Tested from 3745 ft. to 3810 ft. Total Depth 3810 ft.

Packer Depth 3740 ft. Size 6 3/4 in. Packer depth ----- ft. Size 6 3/4 in.

Packer Depth 3745 ft. Size 6 3/4 in. Packer depth ----- ft. Size 6 3/4 in.

Depth of Selective Zone Set -----

Top Recorder Depth (Inside) 3731 ft. Recorder Number 5951 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 3780 ft. Recorder Number 5584 Cap. 5,000 P.S.I.

Below Straddle Recorder Depth ----- ft. Recorder Number ----- Cap. ----- P.S.I.

Mud Type Chemical Viscosity 61 (.5# LCM) Drill Collar Length ----- ft. I.D. 2 1/4 in.

Weight 9.1 Water Loss 7.6 cc. Weight Pipe Length ----- ft. I.D. 2 7/8 in.

Chlorides 7700 P.P.M. Drill Pipe Length 3720 ft. I.D. 3 1/2 in.

Jars: Make STERLING Serial Number ----- Test Tool Length 25 ft. Tool Size 3 1/2-IF in.

Did Well Flow? GTS Reversed Out NO Anchor Length 65 ft. Size 4 1/2-FH in.

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Strong blow @ BOB in 30 seconds. GTS in 18 minutes. Bled off, no blowback.

2nd Open: Strong blow @ BOB immediately. Guaged Gas. Bled off, strong blowback.

Recovered 370 ft. of Very Gassy HOCM 50% gas, 17% oil, 33% mud

Recovered 125 ft. of Very Gassy HMCO 45% gas, 35% oil, 20% mud

Recovered ----- ft. of Total Fluid Recovered: 495'

Recovered ----- ft. of Maximum Gas Flow Rate: 45,500 CF/D

Recovered ----- ft. of Gas In Pipe: 3225'

Recovered ----- ft. of

Remarks:

Price Job

Other Charges

Insurance

108 round trip miles f/DST #2

Total

Time Set Packer(s) 8:00 AM A.M. P.M. Time Started Off Bottom 11:00 AM A.M. P.M. Maximum Temperature 108 Deg F

Initial Hydrostatic Pressure..... (A) 1895 P.S.I.

Initial Flow Period..... Minutes 30 (B) 78 P.S.I. to (C) 161 P.S.I.

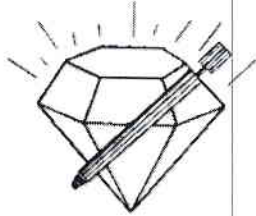
Initial Closed In Period..... Minutes 45 (D) 1204 P.S.I.

Final Flow Period..... Minutes 45 (E) 129 P.S.I. to (F) 202 P.S.I.

Final Closed In Period..... Minutes 60 (G) 1186 P.S.I.

Final Hydrostatic Pressure..... (H) 1876 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



DIAMOND TESTING
 P. O. Box 157
HOISINGTON, KANSAS 67544
 (316) 653-7550
GAS VOLUME REPORT

Company H D Exploration LLC Lease & Well No. Hearn-Debes Unit #1
 Date 1-30-14 Sec. 3 Twp. 25S Rge. 12W Location _____ County Stafford State KS
 Drilling Contractor Southwind #6 Formation Lansing "K&L" DST No. 2
 Remarks: G.T.S. 18 minutes into initial flow period. Gas sample recovered.

INITIAL FLOW

Time O'Clock	Orifice Size	Gauge	CF/D
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	

FINAL FLOW

Time O'Clock	Orifice Size	Gauge	CF/D
	.25 in.	PSI in.	
9:20am	" in.	10 in.	30,800
9:30am	" in.	19 in.	45,500
9:40am	" in.	19 in.	45,500
*9:50am	" in.	17 in.	42,400
10:00am	" in.	16 in.	40,900
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	

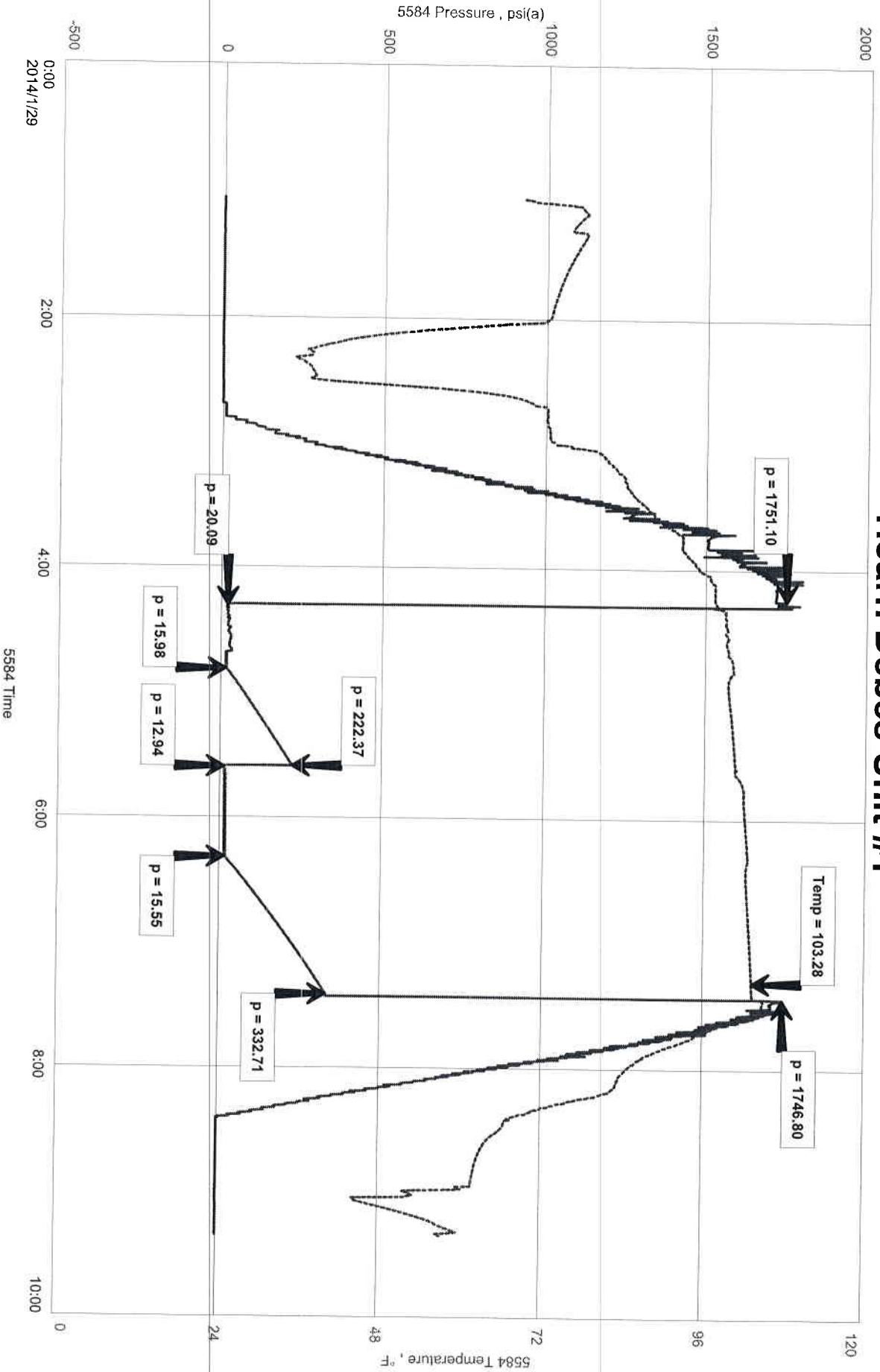
*SAMPLE TAKEN

FINAL FLOW

HD Exploration LLC
DST #1 Lansing "B" 3545'-3580'
Start Test Date: 2014/01/29
Final Test Date: 2014/01/29

Hearn Debes Unit #1

Hearn Debes Unit #1
Formation: Lansing "B" 3545'-3580'
Pool: NA
Job Number: F237





Diamond Testing General Report

**JAKE
FAHRENBRUCH - TESTER
Cell: (620) 282-8977**

P.O. Box 157
Hoisington KS 67544
Office: (800) 542-7313

General Information

Company Name HD Exploration LLC
Well Operator HD Exploration LLC
Contact Gerald Achatz
Site Contact Josh Austin
Field NA
Well Type Vertical
Prepared By Jake Fahrenbruch

Well Name Hearn Debes Unit #1
Unique Well ID DST #1 Lansing "B" 3545'-3580'
Surface Location Sec 3-25s-12w-Stafford Co.-KS
Test Unit #5
Pool NA
Job Number F237
Qualified By Josh Austin

Test Information

Test Type Bottom-Hole w/no special equip.
Formation Lansing "B" 3545'-3580'
Start Test Date 2014/01/29
Final Test Date 2014/01/29

Test Purpose Initial Test
Gauge Name 5584
Start Test Time 01:03:00
Final Test Time 09:20:00

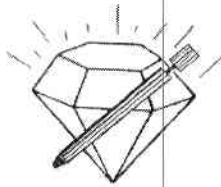
Test Results

30 minute initial flow period: Fairly strong blow. B.O.B. in 6 minutes.
45 minute initial shut-in period: Bled-off, very weak surface blow-back.
45 minute final flow period: Strong blow. B.O.B. immediately. No G.T.S.
60 minute final shut-in period: Bled-off, very weak surface blow-back.

Recovered: 15' Drilling Mud
1200' G.I.P.
Bottom-Hole Temp: 103 Deg F

Pressures:
IHP: 1751
IFP: 20-16
ISIP: 222
FFP: 13-15
FSIP: 333
FHP: 1747

Thanks



DIAMOND TESTING
 P.O. Box 157
 HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: HDU1DST1

TIME ON: 1:03 AM
 TIME OFF: 9:20 AM

Company HD Exploration LLC Lease & Well No. Hearn-Debes Unit #1
 Contractor Southwind Drilling Rig # Charge to HD Exploration LLC
 Elevation 1876' KB Formation Lansing "B" Effective Pay Ft. Ticket No. F237
 Date 1-29-14 Sec. 3 Twp. 25 S Range 12 W County Stafford State KANSAS
 Test Approved By Josh Austin Diamond Representative Jake Fahrenbruch

Formation Test No. ONE Interval Tested from 3545 ft. to 3580 ft. Total Depth 3580 ft.
 Packer Depth 3540 ft. Size 6 3/4 in. Packer depth ft. Size 6 3/4 in.
 Packer Depth 3545 ft. Size 6 3/4 in. Packer depth ft. Size 6 3/4 in.
 Depth of Selective Zone Set

Top Recorder Depth (Inside) 3531 ft. Recorder Number 5951 Cap. 5,000 P.S.I.
 Bottom Recorder Depth (Outside) 3546 ft. Recorder Number 5584 Cap. 5,000 P.S.I.
 Below Straddle Recorder Depth ft. Recorder Number Cap. P.S.I.

Mud Type Chemical Viscosity 61 (1.5# LCM) Drill Collar Length ft. I.D. 2 1/4 in.
 Weight 9.0 Water Loss 8.0 cc. Weight Pipe Length ft. I.D. 2 7/8 in.
 Chlorides 5800 P.P.M. Drill Pipe Length 3520 ft. I.D. 3 1/2 in.
 Jars: Make STERLING Serial Number Test Tool Length 25 ft. Tool Size 3 1/2-IF in.
 Did Well Flow? NO Reversed Out NO Anchor Length 35 ft. Size 4 1/2-FH in.
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Fairly strong blow, B.O.B. in 6 minutes. Very weak surface blow-back.
 2nd Open: Strong blow, B.O.B. immediately. No G.T.S. Very weak surface blow-back.

Recovered 15 ft. of Drilling Mud
 Recovered ft. of 1200' G.I.P.
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:	Price Job
	Other Charges
	Insurance
	Total

Time Set Packer(s) 4:18 AM A.M. P.M. Time Started Off Bottom 7:18 AM A.M. P.M. Maximum Temperature 103 Deg F

Initial Hydrostatic Pressure..... (A) 1751 P.S.I.
 Initial Flow Period..... Minutes 30 (B) 20 P.S.I. to (C) 16 P.S.I.
 Initial Closed In Period..... Minutes 45 (D) 222 P.S.I.
 Final Flow Period..... Minutes 45 (E) 13 P.S.I. to (F) 15 P.S.I.
 Final Closed In Period..... Minutes 60 (G) 333 P.S.I.
 Final Hydrostatic Pressure..... (H) 1747 P.S.I.

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