

Ricketts Testing, Inc.



Company PICKRELL DRILLING CO., INC. Lease & Well No. KNOX "A" #1
 Elevation 1433 K.B. Formation DOUGLAS SAND Ticket No. 1983
 Date 11-12-00 Sec. 25 Twp. 32S Range 9W County HARPER State KS
 Test Approved by _____ Ricketts Representative JIM RICKETTS

Formation Test No. 1 Interval Tested from 3417 ft. to 3434 ft. Total Depth 3434 ft.
 Packer Depth 3417 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
 Packer Depth 3414 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
 Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3422 ft. Recorder Number 13306 Cap. 4625
 Bottom Recorder Depth (Outside) 3425 ft. Recorder Number 13565 Cap. 4475
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor Pickrell Drilling Rig #1 Drill Collar Length 232 I.D. 2.25 in.
 Mud Type Chemical Viscosity 52 Weight Pipe Length _____ I.D. _____ in.
 Weight 9.1 Water Loss 8.8 cc. Drill Pipe Length 3165 I.D. 3.25 in.
 Chlorides 3000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.
 Jars: Make _____ Serial Number _____ Anchor Length 17 ft. Size 5 1/2 in.
 Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
 Gravity Oil _____ Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 x h in.

Blow: Weak blow Initial Flow Period.
Strong blow Final Flow Period.

Recovered 40 ft. of Mud.
 Recovered 640 ft. of Gas in pipe.
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____

Remarks: Hit bridge at 1370 & 3381. Plugging throughout Initial Flow Period.

Time Set Packer (s) 8:25 P M. Time Started Off Bottom 11:55 P M. Maximum Temperature 102°
 Initial Hydrostatic Pressure(A) 1594 P.S.I.
 Initial Flow PeriodMinutes 30 (B) 81* P.S.I. to _____
 (C) 300* P.S.I. *Plugging
 Initial Closed In PeriodMinutes 33 (D) 696 P.S.I.
 Final Flow PeriodMinutes 60 (E) 18 P.S.I. to _____
 (F) 18 P.S.I.
 Final Closed In PeriodMinutes 90 (G) 890 P.S.I.
 Final Hydrostatic Pressure(H) 1585 P.S.I.

RICKETTS TESTING, INC.

Pressure Data

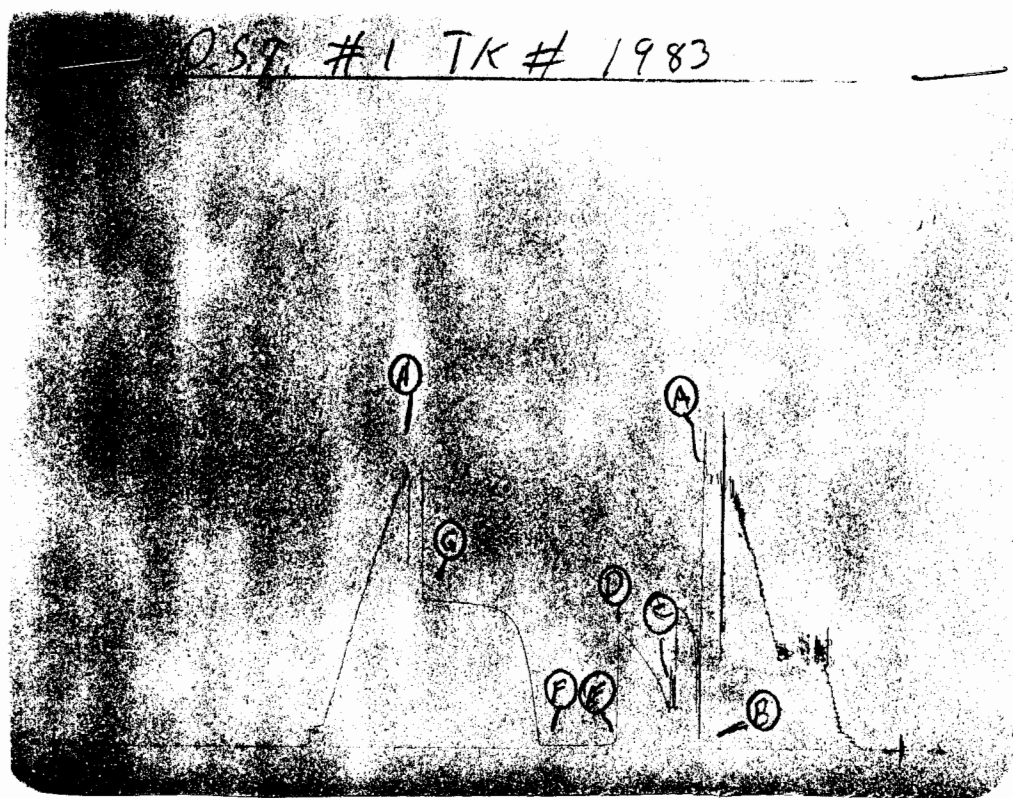
Date 11-12-00 Test Ticket No. 1983
 Recorder No. 13306 Capacity 4625 Location 3422 Ft.
 Clock No. _____ Elevation 1433 K.B. Well Temperature 102 °F

Point	Pressure		Time	
			Given	Computed
A Initial Hydrostatic Mud	<u>1594</u>	P.S.I.	<u>8:25</u>	<u>P M</u>
B First Initial Flow Pressure	<u>81*</u>	P.S.I.	<u>30</u>	<u>Mins.</u>
C First Final Flow Pressure	<u>300*</u>	P.S.I.	<u>30</u>	<u>Mins.</u>
D Initial Closed-in Pressure	<u>696</u>	P.S.I.	<u>60</u>	<u>Mins.</u>
E Second Initial Flow Pressure	<u>18</u>	P.S.I.	<u>90</u>	<u>Mins.</u>
F Second Final Flow Pressure	<u>18</u>	P.S.I.		
G Final Closed-in Pressure	<u>890</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1585</u>	P.S.I.		

*Plugging

PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.
	of <u>6</u> mins. and a		of <u>11</u> mins. and a		of <u>12</u> mins. and a		of <u>30</u> mins. and a	
	final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.	
	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	<u>0</u>	<u>81*</u>	<u>0</u>	<u>300</u>	<u>0</u>	<u>18</u>	<u>0</u>	<u>18</u>
P 2	<u>5</u>	<u>211*</u>	<u>3</u>	<u>251</u>	<u>5</u>	<u>18</u>	<u>3</u>	<u>165</u>
P 3	<u>10</u>	<u>696*</u>	<u>6</u>	<u>416</u>	<u>10</u>	<u>18</u>	<u>6</u>	<u>328</u>
P 4	<u>15</u>	<u>802*</u>	<u>9</u>	<u>450</u>	<u>15</u>	<u>18</u>	<u>9</u>	<u>453</u>
P 5	<u>20</u>	<u>848*</u>	<u>12</u>	<u>490</u>	<u>20</u>	<u>18</u>	<u>12</u>	<u>564</u>
P 6	<u>25</u>	<u>435*</u>	<u>15</u>	<u>526</u>	<u>25</u>	<u>18</u>	<u>15</u>	<u>639</u>
P 7	<u>30</u>	<u>300*</u>	<u>18</u>	<u>559</u>	<u>30</u>	<u>18</u>	<u>18</u>	<u>708</u>
P 8	<u>35</u>		<u>21</u>	<u>592</u>	<u>35</u>	<u>18</u>	<u>21</u>	<u>757</u>
P 9	<u>40</u>		<u>24</u>	<u>618</u>	<u>40</u>	<u>18</u>	<u>24</u>	<u>785</u>
P10	<u>45</u>		<u>27</u>	<u>644</u>	<u>45</u>	<u>18</u>	<u>27</u>	<u>806</u>
P11	<u>50</u>		<u>30</u>	<u>665</u>	<u>50</u>	<u>18</u>	<u>30</u>	<u>820</u>
P12	<u>55</u>		<u>33</u>	<u>696</u>	<u>55</u>	<u>18</u>	<u>33</u>	<u>832</u>
P13	<u>60</u>		<u>36</u>		<u>60</u>	<u>18</u>	<u>36</u>	<u>841</u>
P14	<u>65</u>		<u>39</u>		<u>65</u>		<u>39</u>	<u>848</u>
P15	<u>70</u>		<u>42</u>		<u>70</u>		<u>42</u>	<u>855</u>
P16	<u>75</u>		<u>45</u>		<u>75</u>		<u>45</u>	<u>859</u>
P17	<u>80</u>		<u>48</u>		<u>80</u>		<u>48</u>	<u>863</u>
P18	<u>85</u>		<u>51</u>		<u>85</u>		<u>51</u>	<u>865</u>
P19	<u>90</u>		<u>54</u>		<u>90</u>		<u>54</u>	<u>867</u>
P20	<u>95</u>		<u>57</u>				<u>57</u>	<u>869</u>
			<u>60</u>				<u>60</u>	<u>872</u>



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	1608	1594	PSI
(B) First Initial Flow Pressure	86*	81*	PSI
(C) First Final Flow Pressure	836*	300*	PSI
(D) Initial Closed-in Pressure	696	696	PSI
(E) Second Initial Flow Pressure	21	18	PSI
(F) Second Final Flow Pressure	21	18	PSI
(G) Final Closed-in Pressure	895	890	PSI
(H) Final Hydrostatic Mud	1585	1585	PSI

*Plugging



Ricketts Testing, Inc.

Company PICKRELL DRILLING CO., INC. Lease & Well No. KNOX "A" #1
 Elevation 1433 K.B. Formation STALNAKER Ticket No. 1984
 Date 11-14-00 Sec. 25 Twp. 32S Range 9W County HARPER State KS
 Test Approved by _____ Ricketts Representative JIM RICKETTS

Formation Test No. 2 Interval Tested from 3692 ft. to 3704 ft. Total Depth 3704 ft.
 Packer Depth 3692 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
 Packer Depth 3689 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
 Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3697 ft. Recorder Number 13306 Cap. 4625
 Bottom Recorder Depth (Outside) 3700 ft. Recorder Number 13565 Cap. 4475
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor Pickrell Drilling Rig #1 Drill Collar Length 232 I.D. 2.25 in.
 Mud Type Chemical Viscosity 60 Weight Pipe Length _____ I.D. _____ in.
 Weight 9.0 Water Loss 8.8 cc. Drill Pipe Length 3440 I.D. 3.25 in.
 Chlorides 3000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.
 Jars: Make _____ Serial Number _____ Anchor Length 12 ft. Size 5 1/2 in.
 Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
 Gravity Oil _____ Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 in.

Blow: Strong blow. Gas to surface 10 minutes Initial Flow Period. Gauged 581,000 CFPD

Recovered 60 ft. of Slightly water cut mud.
 Recovered 60 ft. of Water cut mud.
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____

Remarks: DST Fluid Chlorides 28,000 PPM Estimated bottom hole pressure at 90 minutes=993

Time Set Packer (s) 1:14 A.M. Time Started Off Bottom _____ 5:04 A M. Maximum Temperature 120°
 Initial Hydrostatic Pressure(A) 2011 P.S.I.
 Initial Flow PeriodMinutes 30 (B) 130 P.S.I. to
 (C) 150 P.S.I.
 Initial Closed In PeriodMinutes 57 (D) 1002 P.S.I.
 Final Flow PeriodMinutes 50 (E) 200 P.S.I. to
 (F) 188 P.S.I.
 Final Closed In PeriodMinutes 15 (G) 925 P.S.I.
 Final Hydrostatic Pressure(H) 1983 P.S.I.

RICKETTS TESTING, INC.

Pressure Data

Date 11-14-00 Test Ticket No. 1984
 Recorder No. 13565 Capacity 4475 Location 3700 Ft.
 Clock No. _____ Elevation 1433 K.B. Well Temperature 120 °F

Point	Pressure		Open Tool	Time Given	Time Computed
		P.S.I.		_____	_____
A Initial Hydrostatic Mud	2011	P.S.I.	Open Tool	1:14 A M	
B First Initial Flow Pressure	130	P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	150	P.S.I.	Initial Closed-in Pressure	60 Mins.	57 Mins.
D Initial Closed-in Pressure	1002	P.S.I.	Second Flow Pressure	50 Mins.	50 Mins.
E Second Initial Flow Pressure	200	P.S.I.	Final Closed-in Pressure	90 Mins.	15 Mins.
F Second Final Flow Pressure	188	P.S.I.			
G Final Closed-in Pressure	925	P.S.I.			
H Final Hydrostatic Mud	1983	P.S.I.			

*Partial Plugging
 ** Estimated pressure 993 PSI for Final Shut-in at 90 minutes.

PRESSURE BREAKDOWN

First Flow Pressure Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of _____ Min.	Initial Shut-In Breakdown: <u>19</u> Inc. of <u>3</u> mins. and a final inc. of _____ Min.	Second Flow Pressure Breakdown: <u>10</u> Inc. of <u>5</u> mins. and a final inc. of _____ Min.	Final Shut-In Breakdown: <u>5</u> Inc. of <u>3</u> mins. and a final inc. of _____ Min.
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Point Mins.	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	0	130*	0	150	0	200	0	188
P 2	5	115	3	849	5	195	3	819
P 3	10	125	6	927	10	192	6	882
P 4	15	131	9	948	15	188	9	905
P 5	20	140	12	959	20	188	12	914
P 6	25	147	15	969	25	188	15	925
P 7	30	150	18	975	30	188	18	
P 8	35		21	979	35	188	21	
P 9	40		24	984	40	188	24	
P10	45		27	987	45	188	27	
P11	50		30	990	50	188	30	
P12	55		33	993	55		33	
P13	60		36	996	60		36	
P14	65		39	998	65		39	
P15	70		42	1000	70		42	
P16	75		45	1001	75		45	
P17	80		48	1002	80		48	
P18	85		51	1002	85		51	
P19	90		54	1002	90		54	
P20	95		57	1002			57	
			60				60	
							90	993(est)



Ricketts Testing

GAS FLOW REPORT

Date 11-14-00 Ticket 1984 Company Pickrell Drilling Co., Inc.
 Well Name and No. Knox "A" #1 Dst No. 2 Interval Tested 3692-3704
 County Harper State KS Sec. 25 Twp. 32S Rg. 9W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Meria Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
3/4" Orifice		PRE FLOW				Gas to surface 10 Min IFP
1:24AM	10	2 PSI				108,000 CFPD
1:34AM	20	18 PSI				370,000 CFPD
1:44AM	30	23 PSI				436,000 CFPD

3/4" Orifice		SECOND FLOW				
2:54AM	10	32 PSI				546,000 CFPD
3:04AM	20	35 PSI				581,000 CFPD
3:14AM	30	35 PSI				581,000 CFPD
3:24AM	40	35 PSI				581,000 CFPD
3:34AM	50	35 PSI				581,000 CFPD

GAS BOTTLE

Serial No. _____ Date Bottle Filled _____ Date to be Invoiced _____

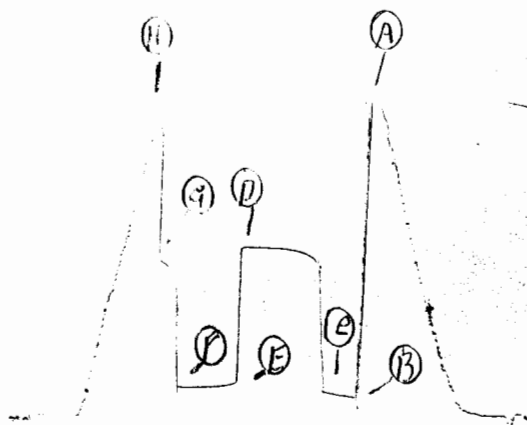
Requisition and Provisions for high pressure steel gas bottles. Ricketts Testing shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Ricketts Testing within thirty (30) days free of charge or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1½% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME _____

Authorized by _____

D.S.T. # 2 1K # 1984



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2011	2011	PSI
(B) First Initial Flow Pressure	131	130	PSI
(C) First Final Flow Pressure	154	150	PSI
(D) Initial Closed-in Pressure	1021	1002	PSI
(E) Second Initial Flow Pressure	211	200	PSI
(F) Second Final Flow Pressure	211	188	PSI
(G) Final Closed-in Pressure	964	925	PSI
(H) Final Hydrostatic Mud	1983	1983	PSI