

15-051-25023

TRILOBITE TESTING L.L.C.

17-11s-19w

OPERATOR : Murfin Drilling Co, Inc.
 WELL NAME: Giinther-Hagen #1-17
 LOCATION : 17-11s-19w Ellis co KS
 INTERVAL : 3269.00 To 3296.00 ft

DATE 3-30-00

KB 2005.00 ft TICKET NO: 12940 DST #1
 GR 2000.00 ft FORMATION: LKC "C"zone
 TD 3296.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	11085	11085	3027			PF Fr. 1859 to 1929 hr
SI 45 Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0	IS Fr. 1929 to 2014 hr
SF 60 Clock(hrs)	12hr	12hr	elec			SF Fr. 2014 to 2114 hr
FS 90 Depth(ft)	3290.0	3290.0	3272.0	0.0	0.0	FS Fr. 2114 to 2244 hr

	Field	1	2	3	4	
A. Init Hydro	1560.0	1579.0	1570.0	0.0	0.0	T STARTED 1657 hr
B. First Flow	33.0	44.0	13.0	0.0	0.0	T ON BOTM 1855 hr
B1. Final Flow	55.0	63.0	43.0	0.0	0.0	T OPEN 1859 hr
C. In Shut-in	702.0	712.0	700.0	0.0	0.0	T PULLED 2244 hr
D. Init Flow	77.0	83.0	47.0	0.0	0.0	T OUT 0039 hr
E. Final Flow	88.0	107.0	83.0	0.0	0.0	
F. Fl Shut-in	702.0	706.0	692.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1549.0	1525.0	1556.0	0.0	0.0	Tool Wt. 2000.00 lbs
Inside/Outside	o	o	i			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 50000.00 lbs
						Initial Str Wt 43000.00 lbs
						Unseated Str Wt 43000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.78 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 240.00 ft
						D.P. Length 3040.00 ft

RECOVERY

Tot Fluid 130.00 ft of 130.00 ft in DC and 0.00 ft in DP
 2.00 ft of Clean oil
 0.00 ft of 100% oil
 30.00 ft of Slightly oil cut muddy water
 0.00 ft of 3% oil 57% water 40% mud
 98.00 ft of Muddy water
 0.00 ft of 80% water 20% mud
 0.00 ft of
 0.00 ft of

SALINITY 32000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:

Weak blow throughout 1/4" to 3/4"
 blow.

Final Flow:

Weak blow throughout 1/4" blow.

Final Shut-In:

No blow.

SAMPLES:

SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	8.90 lb/cf
Vis.	48.00 S/L
W.L.	8.80 in3
F.C.	0.00 in
Mud Drop	

Amt. of fill	0.00 ft
Btm. H. Temp.	101.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	

Tester	Ray Schwager
Co. Rep.	Randy Killian
Contr.	Murfin Drlg.
Rig #	8
Unit #	
Pump T.	

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Giinther-Hagen #1-17

LOCATION : 17-11s-19w Ellis co KS

TICKET No. 12940 D.S.T. No. 1 DATE 3-30-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 27

TOTAL TOOL 47

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY

D.C. ABOVE TOOLS.Stands4 Single Total 240

D.P. ABOVE TOOLS.Stands49 Single Total 3040

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3327

TOTAL DEPTH 3296

TOTAL DRILL PIPE ABOVE K.B. 31

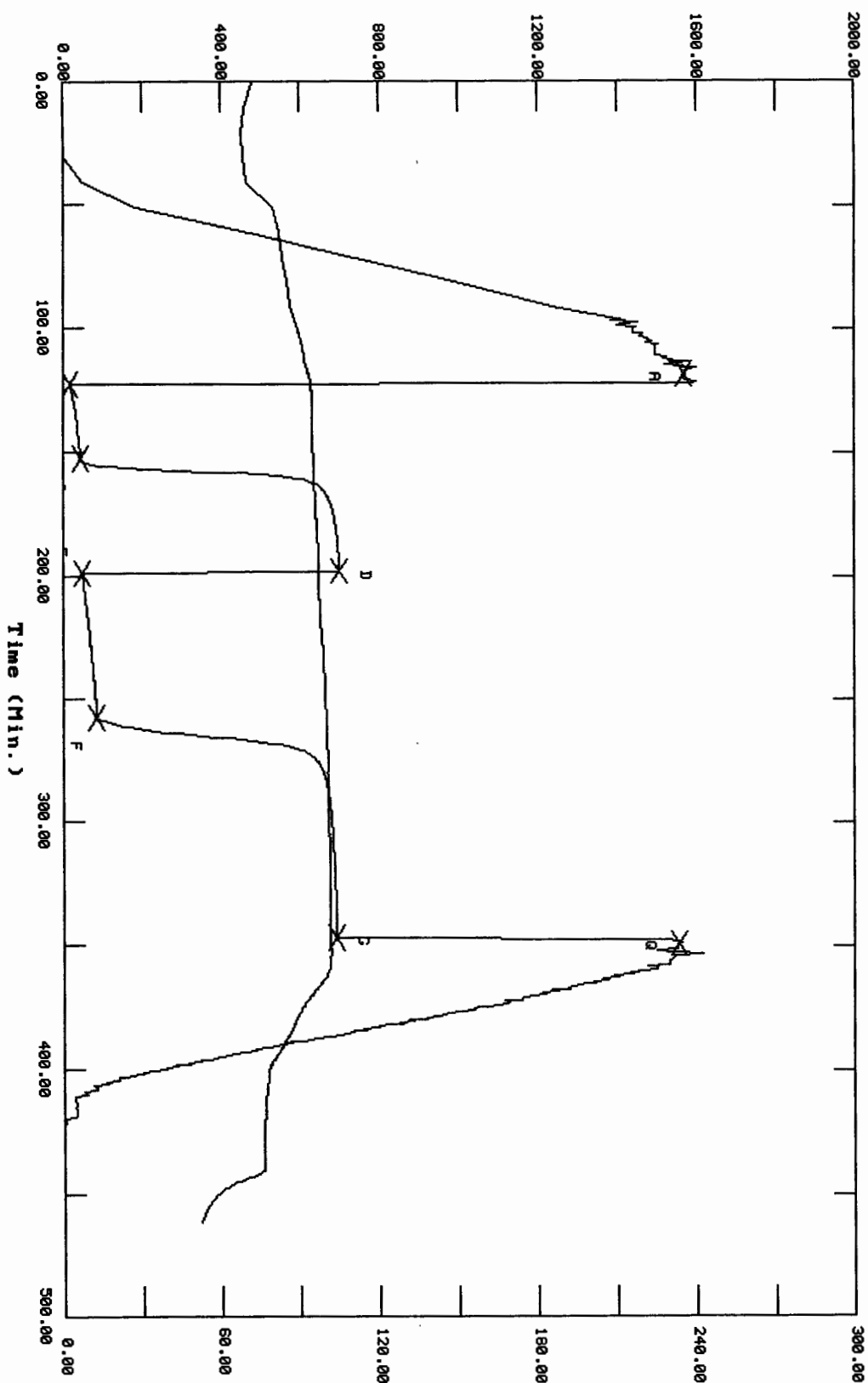
REMARKS:

RW .45 @33F

P.O. SUB	3127
C.O. SUB	3249
S.I. TOOL	3254
HMV	3259
JARS	
SAFETY JOINT	
PACKER	3264
PACKER	3269
DEPTH	
ANCHOR 5'perf	3270
5' "	3275
5' "	3280
5' "	3285
Alpine@3272	3290
Ak-1 @3290	
3'perf	3293
BULLNOSE 3'bullplug	3296
T.D.	3296

TEST HISTORY

12948 DST#1 Glinther-Hagen Unit#1-17 Murfin Drilling Co, Inc.

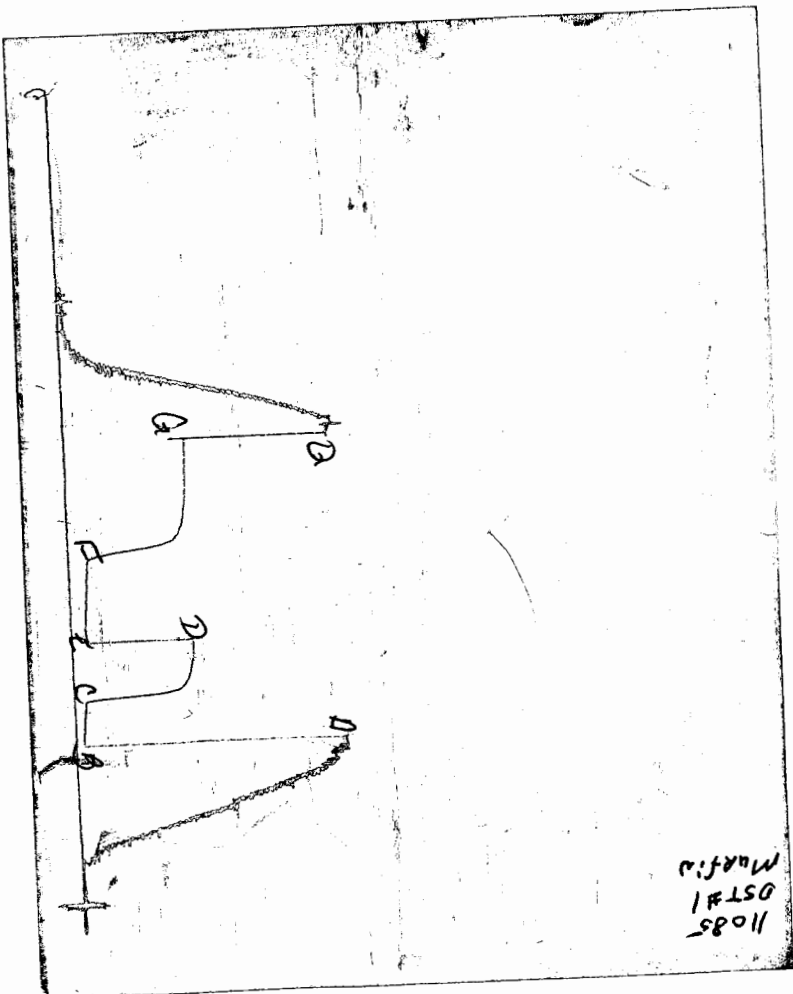


Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1570.04
B:	0.00	13.56
C:	30.00	43.14
D:	45.50	700.28
E:	0.00	47.05
F:	59.00	83.76
G:	89.00	892.97
H:	0.00	1556.78

Temperature (DEG F)

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 12940

Test Ticket

Well Name & No.	<u>Glinther-Hagen #1-17</u>	Test No.	<u>1</u>	Date	<u>3-30-00</u>
Company	<u>Murfin Drilling Co., Inc.</u>	Zone Tested	<u>LCK "C"</u>		
Address	<u>250 N. WATER, Suite 300 Wichita, KS 67202</u>	Elevation	<u>2005</u> KB <u>19%</u> GL <u>2000</u>		
Co. Rep / Geo.	<u>Randy Killian</u>	Cont.	<u>Murfin 8</u>	Est. Ft. of Pay	<u>-</u> Por. <u>-</u> %
Location: Sec.	<u>17</u>	Twp.	<u>11</u>	Rge.	<u>19^W</u> Co. <u>ELLIS</u> State <u>Ks</u>
No. of Copies	<u>Reg</u>	Distribution Sheet (Y, N)	<u>N</u>	Turnkey (Y, N)	<u>N</u> Evaluation (Y, N) <u>-</u>

Interval Tested	<u>3269-3296</u>	Initial Str Wt/Lbs.	<u>43000</u>	Unseated Str Wt/Lbs.	<u>43000</u>
Anchor Length	<u>27</u>	Wt. Set Lbs.	<u>20000</u>	Wt. Pulled Loose/Lbs.	<u>5000</u>
Top Packer Depth	<u>3264</u>	Tool Weight	<u>2000</u>		
Bottom Packer Depth	<u>3269</u>	Hole Size — 7 7/8"	<u>yes</u>	Rubber Size — 6 3/4"	<u>yes</u>
Total Depth	<u>3296</u>	Wt. Pipe Run	<u>-</u>	Drill Collar Run	<u>240</u>
Mud Wt. <u>8.9</u> LCM <u>-</u> Vis. <u>48</u> WL <u>8.8</u>		Drill Pipe Size	<u>4 1/2 XH</u>	Ft. Run	<u>3040</u>
Blow Description	<u>TFP - WEAK Blow Throughout 1/4" To 3/4" Blow</u> <u>FFP - WEAK Blow Throughout 1/4" Blow</u>				

Recovery — Total Feet	<u>130</u>	GIP	<u>-</u>	Ft. in DC	<u>130</u>	Ft. in DP	<u>-</u>
Rec. <u>2</u>	Feet Of <u>CLEAN OIL</u>	%gas	<u>-</u>	%oil	<u>-</u>	%water	<u>-</u>
Rec. <u>30</u>	Feet Of <u>SOC MW</u>	%gas	<u>3</u>	%oil	<u>57</u>	%water	<u>40</u>
Rec. <u>98</u>	Feet Of <u>MW</u>	%gas	<u>-</u>	%oil	<u>80</u>	%water	<u>20</u>
Rec. <u>-</u>	Feet Of <u>-</u>	%gas	<u>-</u>	%oil	<u>-</u>	%water	<u>-</u>
Rec. <u>-</u>	Feet Of <u>-</u>	%gas	<u>-</u>	%oil	<u>-</u>	%water	<u>-</u>
BHT <u>101</u>	°F Gravity <u>-</u>	°API D@ <u>-</u>	°F Corrected Gravity <u>-</u>	°API	<u>-</u>		
RW <u>.45</u> @ <u>33</u>	°F Chlorides <u>32000</u>	ppm Recovery	Chlorides <u>3800</u>	ppm System	<u>-</u>		

	AK-1	Alpine					
(A) Initial Hydrostatic Mud	<u>1560</u>	<u>1570</u>	PSI	Recorder No. <u>3027</u>	T-On Location	<u>1630</u>	
(B) First Initial Flow Pressure	<u>33</u>	<u>13</u>	PSI	(depth) <u>3272</u>	T-Started	<u>1657</u>	
(C) First Final Flow Pressure	<u>55</u>	<u>43</u>	PSI	Recorder No. <u>11085</u>	T-Open	<u>1859</u>	
(D) Initial Shut-In Pressure	<u>702</u>	<u>700</u>	PSI	(depth) <u>3290</u>	T-Pulled	<u>2244</u>	
(E) Second Initial Flow Pressure	<u>77</u>	<u>47</u>	PSI	Recorder No. <u>-</u>	T-Out	<u>0039</u>	
(F) Second Final Flow Pressure	<u>88</u>	<u>83</u>	PSI	(depth) <u>-</u>	T-Off Location	<u>0100</u>	
(G) Final Shut-in Pressure	<u>702</u>	<u>692</u>	PSI	Initial Opening <u>30</u>	Test	<u>✓</u> <u>600</u>	
(Q) Final Hydrostatic Mud	<u>1549</u>	<u>1556</u>	PSI	Initial Shut-in <u>45</u>	Jars	<u>-</u>	
				Final Flow <u>60</u>	Safety Joint	<u>-</u>	
				Final Shut-in <u>90</u>	Straddle	<u>-</u>	

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF 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 STATEMENTS OR OPINION CONCERNING THE RESULTS 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.

Approved By _____

Our Representative Ray Schwager Thank you

Extra Packer _____
Elec. Rec. ✓ 150
Mileage _____
Other 1 hr 30
TOTAL PRICE \$ ✓ 780

TRILOBITE TESTING L.L.C.

OPERATOR : Murfin Drilling Co, Inc.
WELL NAME: Giinther-Hagen Unit#1-17
LOCATION : 17-11s-19w Ellis co KS
INTERVAL : 3301.00 To 3340.00 ft

DATE 3-31-00
KB 2005.00 ft TICKET NO: 12941 DST #2
GR 2000.00 ft FORMATION: LKC D,E,&F zone
TD 3340.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	11085		3027			PF Fr. 1051 to 1121 hr
SI 45 Range(Psi)	4300.0	0.0	4995.0	0.0	0.0	IS Fr. 1121 to 1206 hr
SF 60 Clock(hrs)	12hr		elec			SF Fr. 1206 to 1306 hr
FS 90 Depth(ft)	3334.0	0.0	3303.0	0.0	0.0	FS Fr. 1306 to 1436 hr

	Field	1	2	3	4	
A. Init Hydro	1582.0	0.0	1594.0	0.0	0.0	T STARTED 0844 hr
B. First Flow	33.0	0.0	31.0	0.0	0.0	T ON BOTM 1047 hr
B1. Final Flow	132.0	0.0	164.0	0.0	0.0	T OPEN 1051 hr
C. In Shut-in	407.0	0.0	414.0	0.0	0.0	T PULLED 1436 hr
D. Init Flow	187.0	0.0	162.0	0.0	0.0	T OUT 1656 hr
E. Final Flow	253.0	0.0	265.0	0.0	0.0	
F. Fl Shut-in	407.0	0.0	412.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1582.0	0.0	1579.0	0.0	0.0	Tool Wt. 2000.00 lbs
Inside/Outside	o		i			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 54000.00 lbs
						Initial Str Wt 43000.00 lbs
						Unseated Str Wt 46000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.78 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 240.00 ft
						D.P. Length 3071.00 ft

RECOVERY

Tot Fluid 460.00 ft of 240.00 ft in DC and 220.00 ft in DP
10.00 ft of Clean Oil
150.00 ft of Heavily oil cut muddy water
0.00 ft of 20% oil 50% water 30% mud
300.00 ft of Water
0.00 ft of 100% water
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of

SALINITY 68000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:
Weak building to a good blow. 1/2"
to 7" blow.
Final Flow:
Good to a strong blow in 30 minutes.
7" to bootom of bucket.

Final Shut-In:
Had blow.

SAMPLES:
SENT TO:

MUD DATA-----
Mud Type Chemical
Weight 48.00 lb/cf
Vis. 8.80 S/L
W.L. 0.00 in3
F.C. 0.00 in
Mud Drop
Amt. of fill 0.00 ft
Btm. H. Temp. 107.00 F
Hole Condition good
% Porosity 0.00
Packer Size 6.75 in
No. of Packers 2
Cushion Amt. 0.00
Cushion Type
Reversed Out N
Tool Chased N
Tester Ray Schwager
Co. Rep. Randy Killian
Contr. Murfin Drlg.
Rig # 8
Unit #
Pump T.

Test Successful: Y

P.O. SUB	3160
C.O. SUB	3281
S.I. TOOL	3286
HMV	3291
JARS	
SAFETY JOINT	
PACKER	3296
PACKER	3301
DEPTH	3302
ANCHOR 5'perf	3307
5' "	3312
5' "	3317
5' "	3322
5' "	3327
Alpine@3303	
Ak-1 @3334	
5'perf	3332
5' "	3337
BULLNOSE 3'bullplug	3340
T.D.	3340

REMARKS:

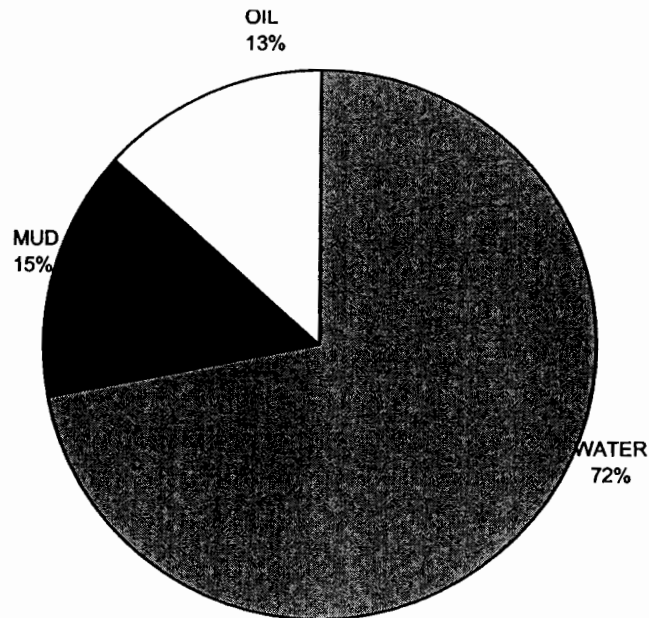
CALCULATED RECOVERY ANALYSIS

DST 2

TICKET 12941

SAMPLE #		TOTAL		GAS		OIL		WATER		MUD	
		FEET	%	FEET	%	FEET	%	FEET	%	FEET	%
DRILL	1	10	0	0	100	10	0	0	0	0	0
PIPE	2	150	0	0	20	30	50	75	30	45	
	3	60	0	0	0	0	100	60	0	0	
	4	0	0	0	0	0	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	
	6	0	0	0	0	0	0	0	0	0	
WEIGHT	1	0	0	0	0	0	0	0	0	0	
PIPE	2	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	0	0	0	
	4	0	0	0	0	0	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	
DRILL	1	240	0	0	0	0	100	240	0	0	
COLLARS	2	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	0	0	0	
	4	0	0	0	0	0	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	
TOTAL		460	0	0	0	40	0	375	0	45	

BBL OIL= 0.5688 * HRS OPEN 1.5 = BBL/DAY 9.1008
 BBL WATER= 3.0933 * = 49.4928
 BBL MUD= 0.6399
 BBL GAS = 0

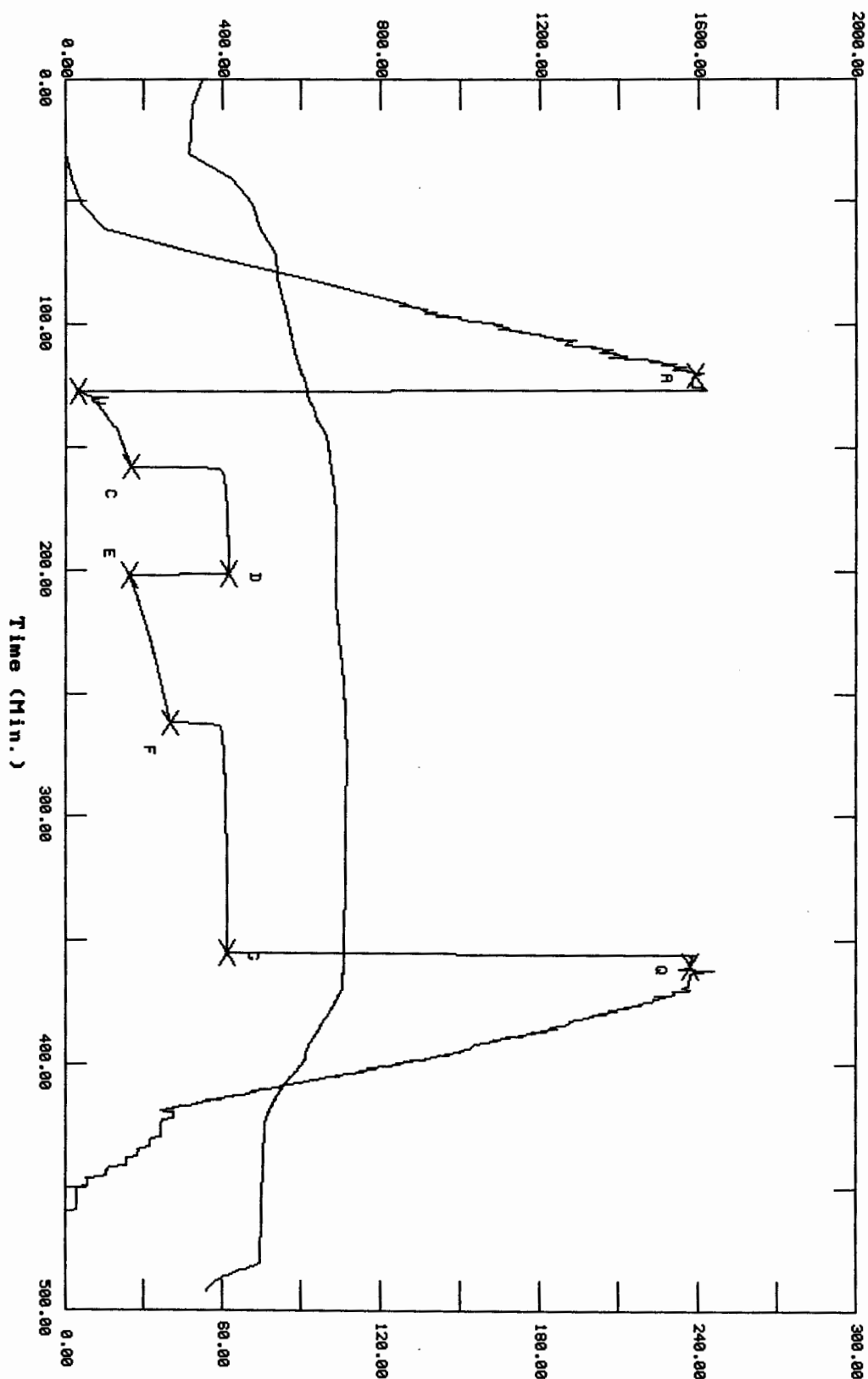


12941 DST#2 Glinther-Hagen Unit#1-17 Murfin Drilling Co., Inc.

TEST HISTORY

Flag Points
t(Min.) P(PSig)

R	0.00	1594.43
B	0.00	31.93
C	31.00	164.73
D	43.50	414.99
E	0.00	162.22
F	60.00	265.49
G	93.00	412.42
Q	0.00	1579.43

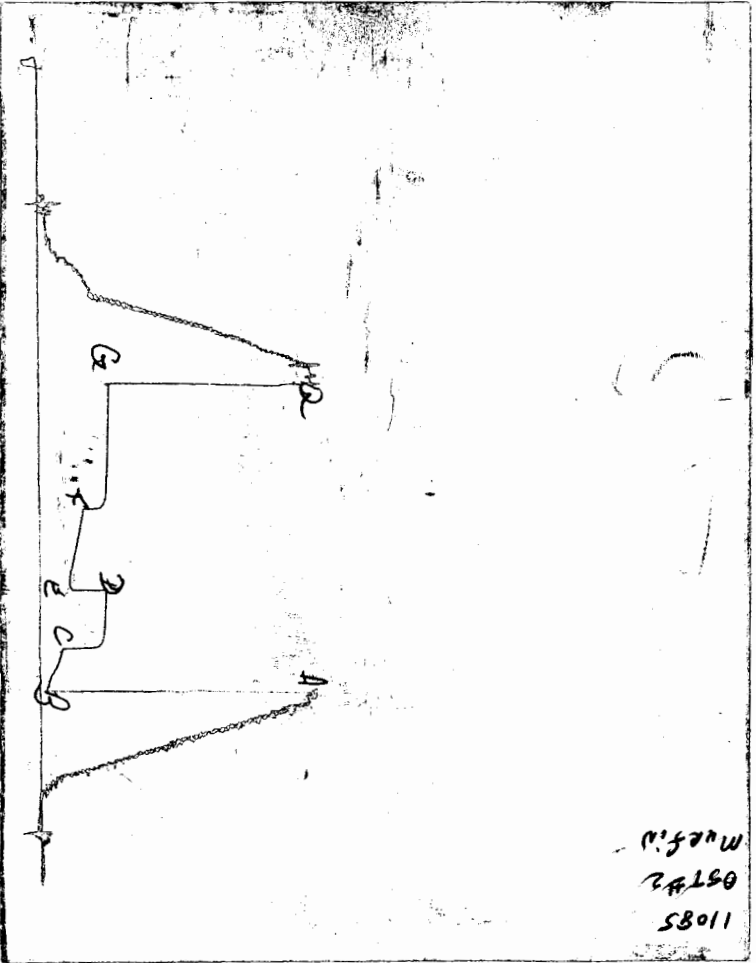


Pressure (PSig)

Temperature (DEG F)

Time (Min.)

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 12941

Test Ticket

Well Name & No.	<u>GINNTER-HAGEN UNIT #1-17</u>		Test No.	<u>2</u>	Date	<u>3-31-00</u>
Company	<u>MURFIN DRILLING CO., INC.</u>		Zone Tested	<u>LKC O.E.F</u>		
Address	<u>250 N. WATER, SUITE 300 WICHITA, KS 67202</u>		Elevation	<u>2005</u>	KB	<u>2000</u> GL
Co. Rep / Geo.	<u>RANDY KILLIAN</u>	Cont.	<u>MURFIN 8</u>	Est. Ft. of Pay	<u>-</u>	Por. <u>-</u> %
Location: Sec.	<u>17</u>	Twp.	<u>11</u>	Rge.	<u>19</u>	Co. <u>ELLIS</u> State <u>KS</u>
No. of Copies	<u>Reg</u>	Distribution Sheet (Y, N)	<u>-</u>	Turnkey (Y, N)	<u>-</u>	Evaluation (Y, N) <u>-</u>

Interval Tested	<u>3301 - 3340</u>	Initial Str Wt./Lbs.	<u>43000</u>	Unseated Str Wt./Lbs.	<u>46000</u>
Anchor Length	<u>39</u>	Wt. Set Lbs.	<u>20000</u>	Wt. Pulled Loose/Lbs.	<u>54000</u>
Top Packer Depth	<u>3296</u>	Tool Weight	<u>2000</u>		
Bottom Packer Depth	<u>3301</u>	Hole Size — 7 7/8"	<u>yes</u>	Rubber Size — 6 3/4"	<u>yes</u>
Total Depth	<u>3340</u>	Wt. Pipe Run	<u>-</u>	Drill Collar Run	<u>240</u>
Mud Wt. <u>9</u> LCM <u>-</u> Vis. <u>4B</u> WL <u>8.8</u>		Drill Pipe Size	<u>4 1/2 XH</u>	Ft. Run	<u>3071</u>
Blow Description	<u>IFP - WEAK building TO A GOOD Blow 1/2" TO 7" Blow</u> <u>FFP - GOOD TO A STRONG Blow in 30 min 7" TO bottom of bucket</u> <u>HAD Blow ON SHUT-IN</u>				

Recovery — Total Feet	<u>460</u>	GIP	<u>-</u>	Ft. in DC	<u>240</u>	Ft. in DP	<u>820</u>
Rec. <u>10</u>	Feet Of	<u>CLEAN OIL</u>	%gas	%oil	%water	%mud	
Rec. <u>150</u>	Feet Of	<u>HOC MW</u>	%gas	<u>20</u> %oil	<u>50</u> %water	<u>30</u> %mud	
Rec. <u>300</u>	Feet Of	<u>WATER</u>	%gas	%oil	%water	%mud	
Rec. <u>-</u>	Feet Of	<u>-</u>	%gas	%oil	%water	%mud	
Rec. <u>-</u>	Feet Of	<u>-</u>	%gas	%oil	%water	%mud	
BHT <u>107</u>	°F Gravity	<u>-</u>	°API D@	<u>-</u>	°F Corrected Gravity	<u>-</u>	°API
RW <u>.19</u> @ <u>42</u>	°F Chlorides	<u>68000</u>	ppm Recovery	<u>-</u>	Chlorides	<u>3800</u>	ppm System

(A) Initial Hydrostatic Mud	<u>1582</u>	AK-1	<u>1594</u>	Alpine	PSI Recorder No.	<u>3027</u>	T-On Location	<u>0830</u>
(B) First Initial Flow Pressure	<u>33</u>		<u>31</u>		PSI (depth)	<u>3303</u>	T-Started	<u>0844</u>
(C) First Final Flow Pressure	<u>132</u>		<u>164</u>		PSI Recorder No.	<u>11085</u>	T-Open	<u>1051</u>
(D) Initial Shut-In Pressure	<u>407</u>		<u>414</u>		PSI (depth)	<u>3334</u>	T-Pulled	<u>1436</u>
(E) Second Initial Flow Pressure	<u>187</u>		<u>162</u>		PSI Recorder No.	<u>-</u>	T-Out	<u>1656</u>
(F) Second Final Flow Pressure	<u>253</u>		<u>265</u>		PSI (depth)	<u>-</u>	T-Off Location	<u>1715</u>
(G) Final Shut-in Pressure	<u>407</u>		<u>412</u>		PSI Initial Opening	<u>30</u>	Test	<u>✓ 600</u>
(Q) Final Hydrostatic Mud	<u>1582</u>		<u>1579</u>		PSI Initial Shut-in	<u>45</u>	Jars	<u>-</u>
					Final Flow	<u>60</u>	Safety Joint	<u>-</u>
					Final Shut-in	<u>90</u>	Straddle	<u>-</u>
							Circ. Sub	<u>-</u>
							Sampler	<u>-</u>
							Extra Packer	<u>-</u>
							Elec. Rec.	<u>✓ 150</u>
							Mileage	<u>-</u>
							Other	<u>ext time 1 @ 30</u>
							TOTAL PRICE \$	<u>✓ 780</u>

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Approved By _____

Our Representative RAY SCHWAGER Thank you

TRILOBITE TESTING L.L.C.

OPERATOR : Murfin Drilling Co., Inc
WELL NAME: Giinther-Hagen Unit#1-17
LOCATION : 17-11s-19w Ellis co KS
INTERVAL : 3343.00 To 3360.00 ft

DATE 3-31-00
KB 2005.00 ft TICKET NO: 12942 DST #3
GR 2000.00 ft FORMATION: LKC "G"zone
TD 3360.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	11085	11085	3027			PF Fr. 0127 to 0157 hr
SI 45 Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0	IS Fr. 0157 to 0242 hr
SF 60 Clock(hrs)	12hr	12hr	elec			SF Fr. 0242 to 0342 hr
FS 90 Depth(ft)	3354.0	3354.0	3345.0	0.0	0.0	FS Fr. 0342 to 0512 hr

	Field	1	2	3	4	
A. Init Hydro	1603.0	1602.0	1584.0	0.0	0.0	T STARTED 2331 hr
B. First Flow	11.0	11.0	14.0	0.0	0.0	T ON BOTM 0124 hr
B1. Final Flow	22.0	36.0	56.0	0.0	0.0	T OPEN 0127 hr
C. In Shut-in	571.0	571.0	587.0	0.0	0.0	T PULLED 0512 hr
D. Init Flow	77.0	90.0	61.0	0.0	0.0	T OUT 0704 hr
E. Final Flow	132.0	121.0	118.0	0.0	0.0	
F. Fl Shut-in	593.0	599.0	589.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1603.0	1585.0	1580.0	0.0	0.0	Tool Wt. 2000.00 lbs
Inside/Outside	o	o	i			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 50000.00 lbs
						Initial Str Wt 44000.00 lbs
						Unseated Str Wt 44000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.78 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 240.00 ft
						D.P. Length 3103.00 ft

RECOVERY

Tot Fluid 200.00 ft of 200.00 ft in DC and 0.00 ft in DP
20.00 ft of Clean Oil
60.00 ft of Slightly oil cut muddy water
0.00 ft of 1% oil 79% water 20% mud
120.00 ft of Water
0.00 ft of 100% water
0.00 ft of
0.00 ft of
0.00 ft of

SALINITY 67000.00 P.P.M. A.P.I. Gravity 30.00

BLOW DESCRIPTION

Initial Flow:
Weak blow throughout. 1/4" to 1 1/2"
blow.

Final Flow:
Weak blow

Final Shut-In:
No blow.

SAMPLES:
SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.00 lb/cf
Vis.	44.00 S/L
W.L.	9.20 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	105.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	
Tester	Ray Schwager
Co. Rep.	Randy Killian
Contr.	Murfin Drlg.
Rig #	8
Unit #	
Pump T.	

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Giinther-Hagen Unit#1-17

LOCATION : 17-11s-19w Ellis co KS

TICKET No. 12942 D.S.T. No. 3 DATE 3-31-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 17

TOTAL TOOL 37

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY

D.C. ABOVE TOOLS.Stands4 Single Total 240

D.P. ABOVE TOOLS.Stands50 Single Total 3103

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3380

TOTAL DEPTH 3360

TOTAL DRILL PIPE ABOVE K.B. 20

REMARKS:

P.O. SUB	3318
C.O. SUB	3323
S.I. TOOL	3328
HMV	3333
JARS	
SAFETY JOINT	
PACKER	3338
PACKER	3343
DEPTH	3344
ANCHOR 5'perf	3349
5' "	3354
Alpine@3345	
Ak-1 @3354	
3'perf	3357
BULLNOSE 3''bullplug	3360
T.D.	3360

TEST HISTORY

12942 DST#3 Glinther-Hagen Unit #1-17 Murfin Drilling Co., Inc.

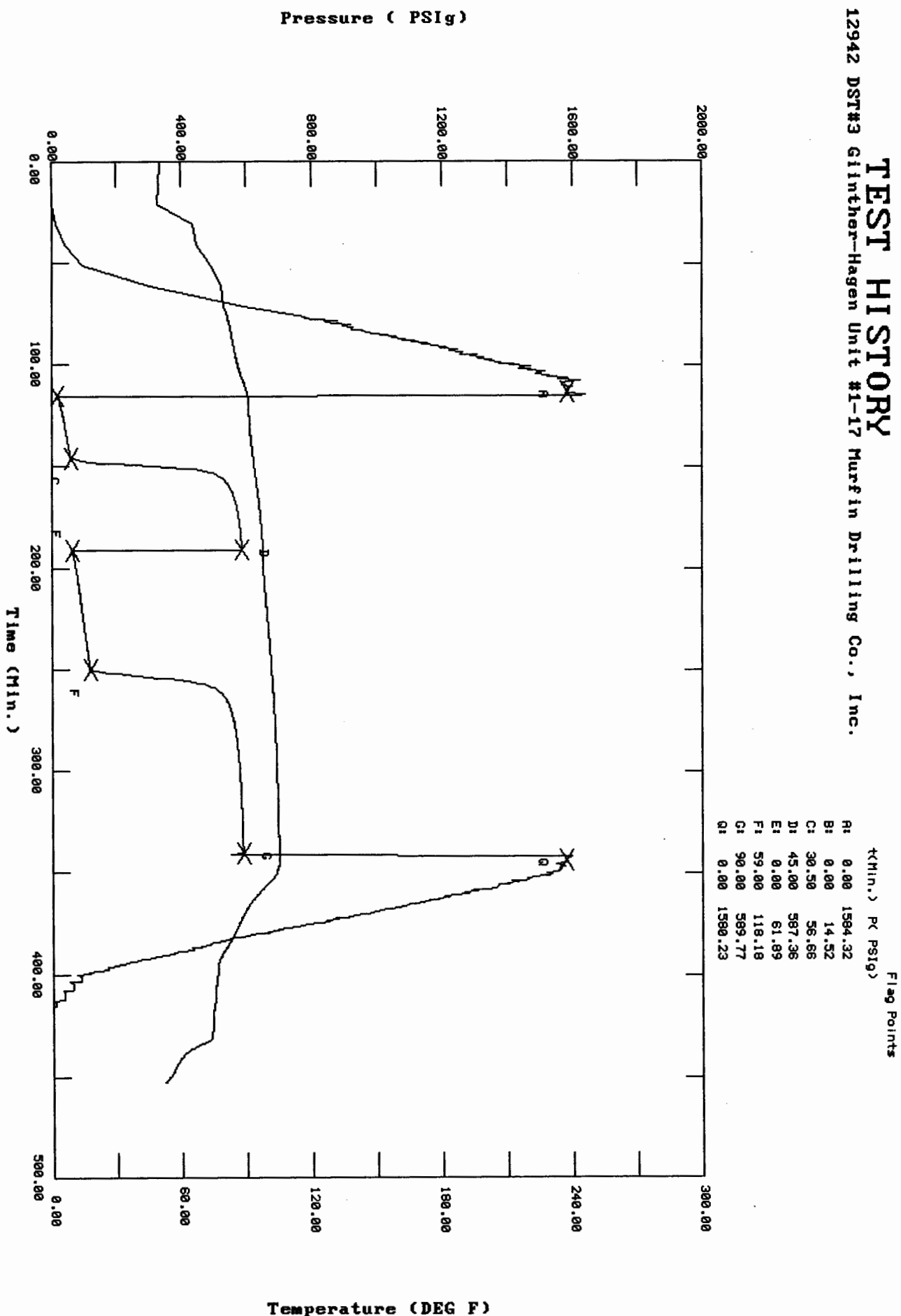
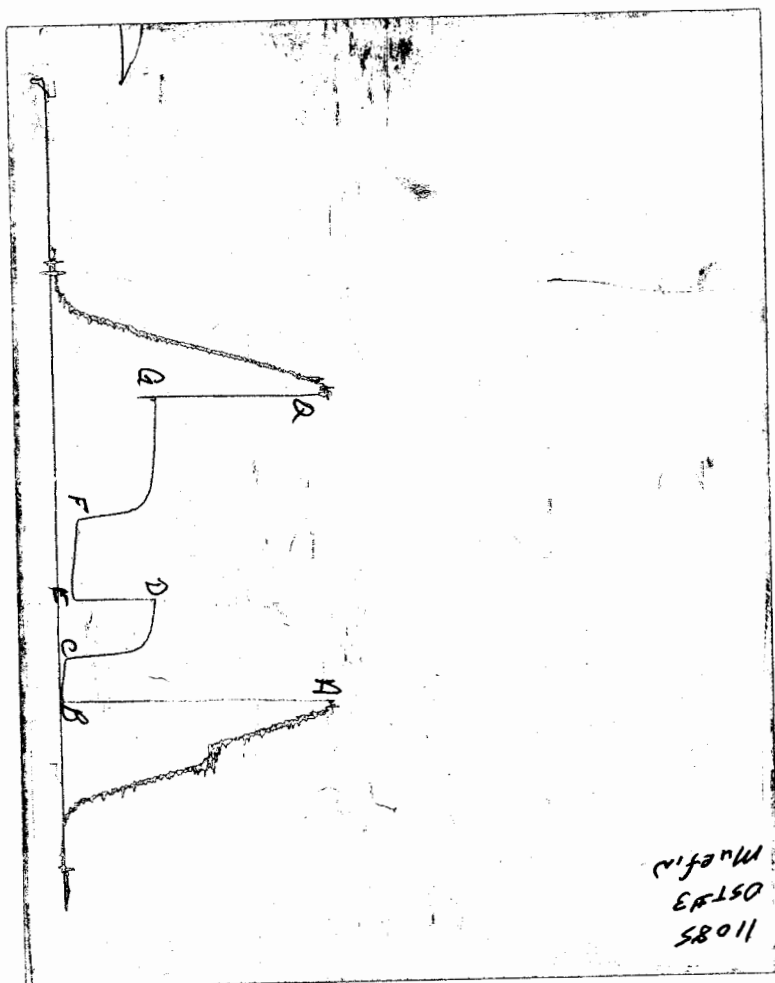


CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 12942

Test Ticket

Well Name & No.	<u>Giinther-Hagen Unit #1-17</u>	Test No.	<u>3</u>	Date	<u>3-31-00</u>
Company	<u>Murfin Drilling Co., Inc.</u>	Zone Tested	<u>LKC 6</u>		
Address	<u>250 N. WATER, SUITE 300 WICHITA, KS 67202</u>	Elevation	<u>2005</u>	KB	<u>2000GL</u>
Co. Rep / Geo.	<u>Randy Killian</u>	Cont.	<u>Murfin 8</u>	Est. Ft. of Pay	<u>—</u> %
Location: Sec.	<u>17</u>	Twp.	<u>15</u>	Rge.	<u>19^W</u>
No. of Copies	<u>Log</u>	Distribution Sheet (Y, N)	<u>N</u>	Turnkey (Y, N)	<u>N</u>
		Evaluation (Y, N)	<u>—</u>		

Interval Tested	<u>3343-3360</u>	Initial Str Wt./Lbs.	<u>44000</u>	Unseated Str Wt./Lbs.	<u>44000</u>
Anchor Length	<u>17</u>	Wt. Set Lbs.	<u>20000</u>	Wt. Pulled Loose/Lbs.	<u>50000</u>
Top Packer Depth	<u>3338</u>	Tool Weight	<u>2000</u>		
Bottom Packer Depth	<u>3343</u>	Hole Size — 7 7/8"	<u>yes</u>	Rubber Size — 6 3/4"	<u>yes</u>
Total Depth	<u>3360</u>	Wt. Pipe Run	<u>—</u>	Drill Collar Run	<u>240</u>
Mud Wt.	<u>9</u>	LCM	<u>—</u>	Vis.	<u>44</u>
Blow Description	<u>IFP - WEAK Blow throughout 1/4" To 1 1/2" Blow</u>				
	<u>FFP - WEAK Blow throughout 1 1/2" Blow</u>				

Recovery — Total Feet	<u>200</u>	GIP	<u>—</u>	Ft. in DC	<u>200</u>	Ft. in DP	<u>—</u>
Rec.	<u>20</u>	Feet Of	<u>CLEAN OIL</u>	%gas	%oil	%water	%mud
Rec.	<u>60</u>	Feet Of	<u>SOC MW</u>	%gas	<u>1</u> %oil	<u>79</u> %water	<u>20</u> %mud
Rec.	<u>120</u>	Feet Of	<u>WATER</u>	%gas	%oil	%water	%mud
Rec.		Feet Of		%gas	%oil	%water	%mud
Rec.		Feet Of		%gas	%oil	%water	%mud
BHT	<u>105</u>	°F Gravity	<u>30</u>	°API D@	<u>60</u>	°F Corrected Gravity	<u>30</u>
RW	<u>.23</u>	@	<u>35</u>	°F Chlorides	<u>67000</u>	ppm Recovery	Chlorides <u>6800</u> ppm System

	AK-1	Alpine		
(A) Initial Hydrostatic Mud	<u>1603</u>	<u>1584</u>	PSI Recorder No.	<u>3027</u>
(B) First Initial Flow Pressure	<u>11</u>	<u>14</u>	PSI (depth)	<u>3345</u>
(C) First Final Flow Pressure	<u>22</u>	<u>56</u>	PSI Recorder No.	<u>11085</u>
(D) Initial Shut-In Pressure	<u>571</u>	<u>587</u>	PSI (depth)	<u>3354</u>
(E) Second Initial Flow Pressure	<u>77</u>	<u>61</u>	PSI Recorder No.	<u>—</u>
(F) Second Final Flow Pressure	<u>132</u>	<u>118</u>	PSI (depth)	<u>—</u>
(G) Final Shut-in Pressure	<u>593</u>	<u>589</u>	PSI Initial Opening	<u>30</u>
(Q) Final Hydrostatic Mud	<u>1603</u>	<u>1580</u>	PSI Initial Shut-in	<u>45</u>
			Final Flow	<u>60</u>
			Final Shut-in	<u>90</u>

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF 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 STATEMENTS OR OPINION CONCERNING THE RESULTS 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.

Approved By _____

Our Representative RAY SCHWAGER THANK YOU

T-On Location	<u>2315</u>
T-Started	<u>2331</u>
T-Open	<u>0127</u>
T-Pulled	<u>0512</u>
T-Out	<u>0704</u>
T-Off Location	<u>0730</u>
Test	<u>✓</u>
Jars	<u>—</u>
Safety Joint	<u>—</u>
Straddle	<u>—</u>
Circ. Sub	<u>—</u>
Sampler	<u>—</u>
Extra Packer	<u>—</u>
Elec. Rec.	<u>✓</u>
Mileage	<u>150</u>
Other	<u>—</u>
TOTAL PRICE \$	<u>750</u>

TRILOBITE TESTING L.L.C.

OPERATOR : Murfin Drilling Co., Inc
WELL NAME: Giinther-Hagen Unit#1-17
LOCATION : 17-11s-19w Ellis co KS
INTERVAL : 3388.00 To 3476.00 ft

DATE 4-01-00
KB 2005.00 ft TICKET NO: 12943 DST #4
GR 2000.00 ft FORMATION: LKC
TD 3476.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	11085	11085	3027			PF Fr. 2022 to 2052 hr
SI 45 Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0	IS Fr. 2052 to 2137 hr
SF 60 Clock(hrs)	12hr	12hr	elec			SF Fr. 2137 to 2237 hr
FS 90 Depth(ft)	3473.0	3473.0	3395.0	0.0	0.0	FS Fr. 2237 to 0007 hr

	Field	1	2	3	4	
A. Init Hydro	1668.0	1752.0	1608.0	0.0	0.0	T STARTED 1803 hr
B. First Flow	77.0	104.0	19.0	0.0	0.0	T ON BOTM 2019 hr
Bl. Final Flow	121.0	129.0	74.0	0.0	0.0	T OPEN 2022 hr
C. In Shut-in	973.0	978.0	938.0	0.0	0.0	T PULLED 0007 hr
D. Init Flow	143.0	156.0	81.0	0.0	0.0	T OUT 0210 hr
E. Final Flow	176.0	188.0	134.0	0.0	0.0	
F. Fl Shut-in	930.0	943.0	902.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1647.0	1733.0	1599.0	0.0	0.0	Tool Wt. 2000.00 lbs
Inside/Outside	o	o	i			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 55000.00 lbs
						Initial Str Wt 45000.00 lbs
						Unseated Str Wt 45000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.78 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 240.00 ft
						D.P. Length 3036.00 ft

RECOVERY

Tot Fluid 270.00 ft of 240.00 ft in DC and 30.00 ft in DP
30.00 ft of Mud
0.00 ft of 100% mud
240.00 ft of Muddy water
0.00 ft of 95% water 5% mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of

SALINITY 58000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:
Weak blow throughout 1/2" to 2" blow.

Final Flow:

Weak blow throughout 2" blow.

Final Shut-In:

No blow.

SAMPLES:

SENT TO:

MUD DATA-----
Mud Type Chemical
Weight 9.20 lb/cf
Vis. 45.00 S/L
W.L. 9.20 in3
F.C. 0.00 in
Mud Drop

Amt. of fill 0.00 ft
Btm. H. Temp. 102.00 F
Hole Condition good
% Porosity 0.00
Packer Size 6.75 in
No. of Packers 2
Cushion Amt. 0.00
Cushion Type
Reversed Out N
Tool Chased N
Tester Ray Schwager
Co. Rep. Randy Killian
Contr. Murfin Drlg.
Rig # 8
Unit #
Pump T.

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Giinther-Hagen Unit#1-17

LOCATION : 17-11s-19w Ellis co KS

TICKET No. 12943 D.S.T. No. 4 DATE 4-01-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 88

TOTAL TOOL 108

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY

D.C. ABOVE TOOLS.Stands4 Single Total 240

D.P. ABOVE TOOLS.Stands50 Single 1 Total 3036

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3384

TOTAL DEPTH 3376

TOTAL DRILL PIPE ABOVE K.B. 8

REMARKS:

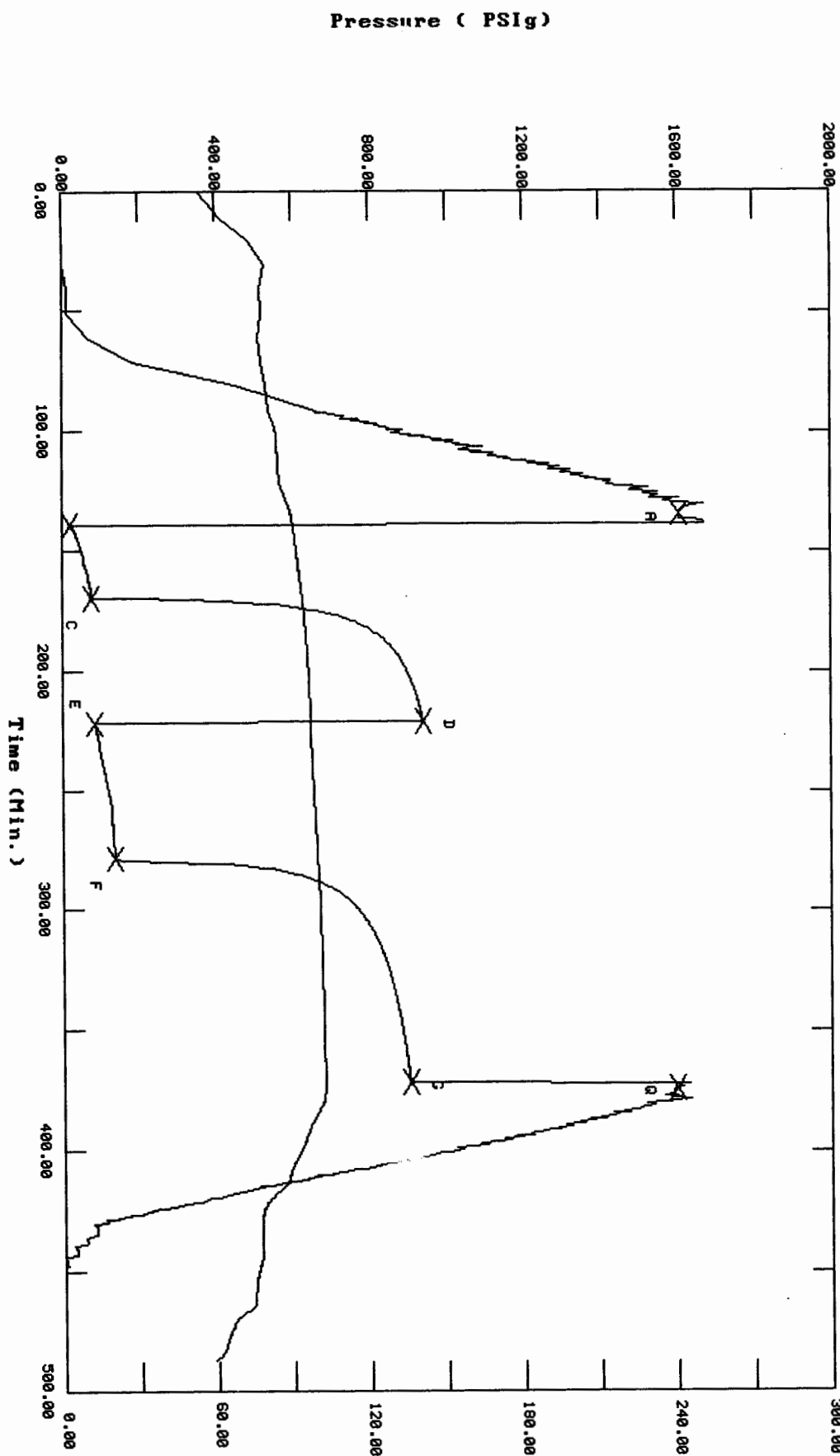
P.O. SUB	3246
C.O. SUB	3368
S.I. TOOL	3373
HMV	3378
JARS	
SAFETY JOINT	
PACKER	3383
PACKER	3388
DEPTH	3389
ANCHOR 3'perf	3392
62'pipe	3454
5'perf	3459
Alpine@3395	
Ak-1 @3473	
5'perf	3464
5' "	3469
4' "	3473
BULLNOSE 3'bullplug	3476
T.D.	3476

12943 DST#4 Glinther-Hagen Unit #1-17 Murfin Drilling, Co., Inc

TEST HISTORY

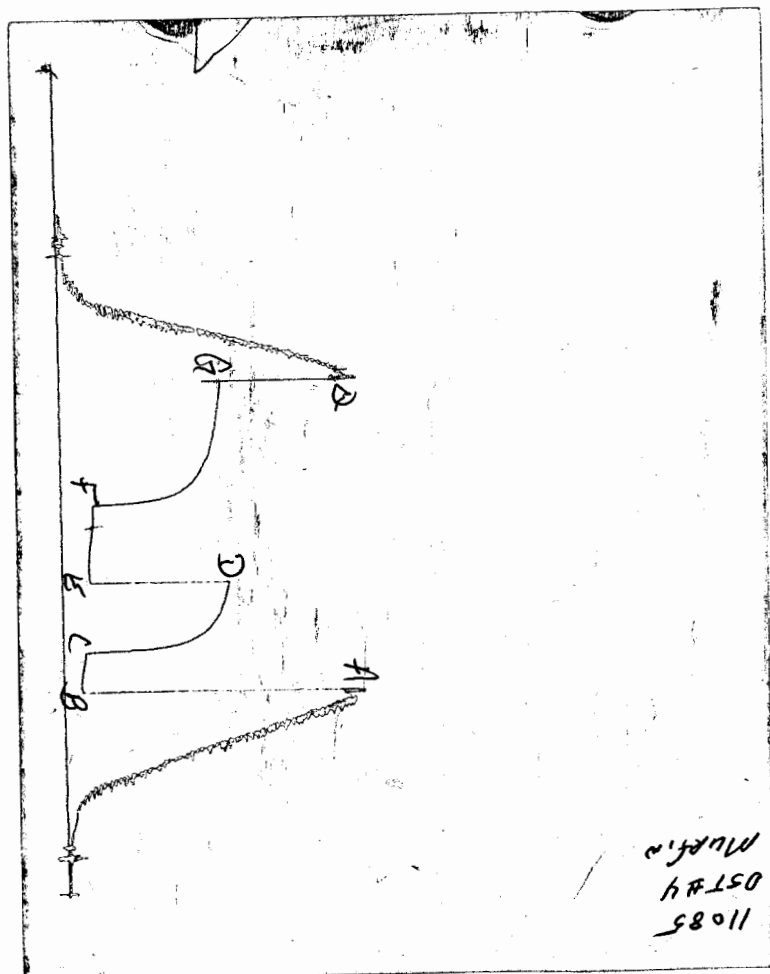
Flag Points
(Min.) P (PSig)

A:	0.00	1608.85
B:	0.00	19.93
C:	30.50	74.93
D:	51.50	938.62
E:	0.00	81.68
F:	56.50	134.83
G:	93.00	902.45
H:	0.00	1599.46



Temperature (DEG F)

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 12943

Test Ticket

Well Name & No.	<u>Guinther-Hagerdahl #1-17</u>	Test No.	<u>4</u>	Date	<u>4-1-00</u>
Company	<u>Murfin Drilling Co., Inc.</u>	Zone Tested	<u>LKC</u>		
Address	<u>250 N. WATER, Suite 300 Wichita, KS 67202</u>	Elevation	<u>2005</u>	KB	<u>2000</u> GL
Co. Rep / Geo.	<u>Randy Killian</u>	Cont.	<u>Murfin 8</u>	Est. Ft. of Pay	<u>-</u> Por. <u>-</u> %
Location: Sec.	<u>17</u>	Twp.	<u>11^S</u>	Rge.	<u>19^W</u> Co. <u>Ellis</u> State <u>Ks</u>
No. of Copies	<u>Reg</u>	Distribution Sheet (Y, N)	<u>-</u>	Turnkey (Y, N)	<u>-</u> Evaluation (Y, N) <u>-</u>

Interval Tested	<u>3388-3476</u>	Initial Str Wt./Lbs.	<u>45000</u>	Unseated Str Wt./Lbs.	<u>45000</u>
Anchor Length	<u>88</u>	Wt. Set Lbs.	<u>20000</u>	Wt. Pulled Loose/Lbs.	<u>55000</u>
Top Packer Depth	<u>3383</u>	Tool Weight	<u>2000</u>		
Bottom Packer Depth	<u>3388</u>	Hole Size — 7 7/8"	<u>yes</u>	Rubber Size — 6 3/4"	<u>yes</u>
Total Depth	<u>3476</u>	Wt. Pipe Run	<u>-</u>	Drill Collar Run	<u>240</u>
Mud Wt.	<u>9.2</u> LCM <u>-</u> Vis. <u>45</u> WL <u>9.2</u>	Drill Pipe Size	<u>4 1/2 X 6</u>	Ft. Run	<u>3036</u>
Blow Description	<u>IFP - WEAK Blow throughout 1/2" To 2" Blow</u> <u>FFP - WEAK Blow throughout 2" Blow</u>				

Recovery — Total Feet	<u>270</u>	GIP	<u>-</u>	Ft. in DC	<u>240</u>	Ft. in DP	<u>30</u>
Rec.	<u>30</u>	Feet Of	<u>mud</u>	%gas		%oil	
Rec.	<u>240</u>	Feet Of	<u>MW</u>	%gas		%oil	<u>95</u> %water <u>5</u> %mud
Rec.		Feet Of		%gas		%oil	%water %mud
Rec.		Feet Of		%gas		%oil	%water %mud
Rec.		Feet Of		%gas		%oil	%water %mud
BHT	<u>102</u>	°F Gravity	<u>-</u>	°API D@	<u>-</u>	°F Corrected Gravity	<u>-</u> °API
RW	<u>.29</u> @ <u>3.3</u>	°F Chlorides	<u>58000</u>	ppm Recovery		Chlorides	<u>6800</u> ppm System

(A) Initial Hydrostatic Mud	<u>AK-1 1668</u>	<u>Alpine 1608</u>	PSI Recorder No.	<u>3027</u>	T-On Location	<u>1745</u>
(B) First Initial Flow Pressure	<u>77</u>	<u>19</u>	PSI (depth)	<u>3395</u>	T-Started	<u>1803</u>
(C) First Final Flow Pressure	<u>121</u>	<u>74</u>	PSI Recorder No.	<u>11085</u>	T-Open	<u>2022</u>
(D) Initial Shut-In Pressure	<u>973</u>	<u>938</u>	PSI (depth)	<u>3473</u>	T-Pulled	<u>0007</u>
(E) Second Initial Flow Pressure	<u>143</u>	<u>81</u>	PSI Recorder No.	<u>-</u>	T-Out	<u>0210</u>
(F) Second Final Flow Pressure	<u>176</u>	<u>134</u>	PSI (depth)	<u>-</u>	T-Off Location	<u>0230</u>
(G) Final Shut-in Pressure	<u>930</u>	<u>902</u>	PSI Initial Opening	<u>30</u>	Test	<u>✓ 600</u>
(Q) Final Hydrostatic Mud	<u>1647</u>	<u>1599</u>	PSI Initial Shut-in	<u>45</u>	Jars	<u>-</u>
			Final Flow	<u>60</u>	Safety Joint	<u>-</u>
			Final Shut-in	<u>90</u>	Straddle	<u>-</u>

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Approved By _____

Our Representative Ray Schwager Thank you

Sampler _____
Extra Packer _____
Elec. Rec. ✓ 150
Mileage _____
Other _____
TOTAL PRICE \$ ✓ 750

TRILOBITE TESTING L.L.C.

OPERATOR : Murfin Drilling Co., Inc
WELL NAME: Giinther-Hagen #1-17
LOCATION : 17-11s-19w Ellis co KS
INTERVAL : 3550.00 To 3566.00 ft

DATE 4-2-00
KB 2005.00 ft TICKET NO: 12944 DST #5
GR 2000.00 ft FORMATION: Arbuckle
TD 3566.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	11085	11085	3027			PF Fr. 1433 to 1503 hr
SI 45 Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0	IS Fr. 1503 to 1548 hr
SF 45 Clock(hrs)	12hr	12hr	elec			SF Fr. 1548 to 1633 hr
FS 90 Depth(ft)	3563.0	3563.0	3553.0	0.0	0.0	FS Fr. 1633 to 1803 hr

	Field	1	2	3	4	
A. Init Hydro	1722.0	1780.0	1703.0	0.0	0.0	T STARTED 1237 hr
B. First Flow	99.0	143.0	91.0	0.0	0.0	T ON BOTM 1430 hr
B1. Final Flow	308.0	329.0	329.0	0.0	0.0	T OPEN 1433 hr
C. In Shut-in	1006.0	1010.0	997.0	0.0	0.0	T PULLED 1803 hr
D. Init Flow	363.0	391.0	340.0	0.0	0.0	T OUT 2027 hr
E. Final Flow	517.0	545.0	528.0	0.0	0.0	
F. Fl Shut-in	984.0	1008.0	996.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1701.0	1764.0	1714.0	0.0	0.0	Tool Wt. 2000.00 lbs
Inside/Outside	o	o	i			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 55000.00 lbs
						Initial Str Wt 47000.00 lbs
						Unseated Str Wt 48000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.78 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 240.00 ft
						D.P. Length 3320.00 ft

RECOVERY

Tot Fluid 1000.00 ft of 240.00 ft in DC and 760.00 ft in DP
5.00 ft of Clean oil
0.00 ft of 100% oil
335.00 ft of Slightly oil cut water
0.00 ft of 2% oil 98% water
660.00 ft of Water
0.00 ft of 100% water
0.00 ft of
0.00 ft of
SALINITY 27000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:
Weak to a strong blow in 3 minutes.
Final Flow:
Weak to a strong blow in 9 minutes.
Final Shut-In:
No blow.

SAMPLES:
SENT TO:

MUD DATA-----
Mud Type Chemical
Weight 9.10 lb/cf
Vis. 47.00 S/L
W.L. 9.20 in3
F.C. 0.00 in
Mud Drop
Amt. of fill 0.00 ft
Btm. H. Temp. 113.00 F
Hole Condition good
% Porosity 0.00
Packer Size 6.75 in
No. of Packers 2
Cushion Amt. 0.00
Cushion Type
Reversed Out N
Tool Chased N
Tester Ray Schwager
Co. Rep. Randy Killian
Contr. Murfin Drlg.
Rig # 8
Unit #
Pump T.

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Giinther-Hagen #1-17

LOCATION : 17-11s-19w Ellis co KS

TICKET No. 12944 D.S.T. No. 5 DATE 4-2-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 16

TOTAL TOOL 36

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY

D.C. ABOVE TOOLS.Stands4 Single Total 240

D.P. ABOVE TOOLS.Stands53 Single 1 Total 3320

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3596

TOTAL DEPTH 3566

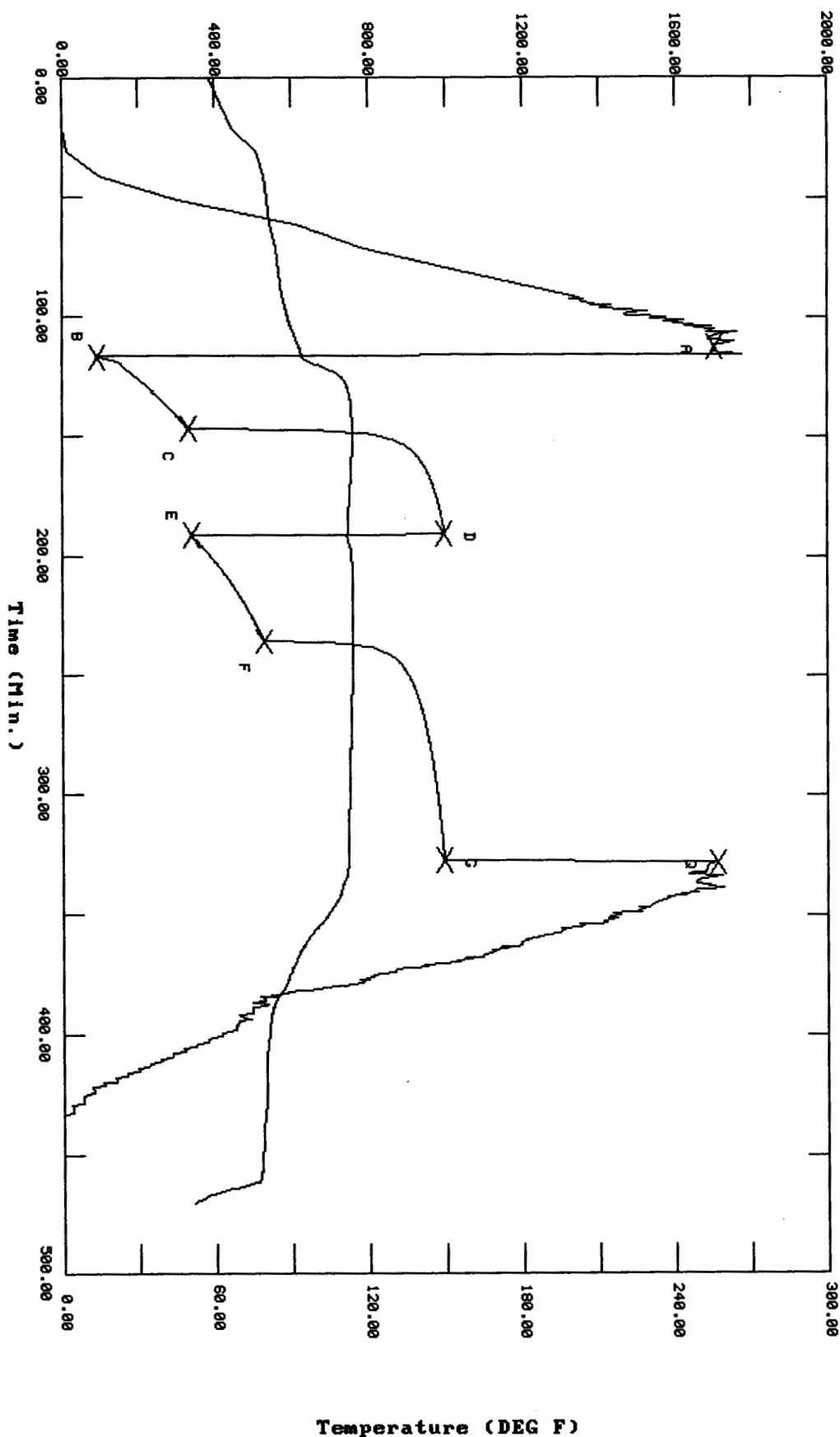
TOTAL DRILL PIPE ABOVE K.B. 30

REMARKS:

P.O. SUB	3410
C.O. SUB	3530
S.I. TOOL	3535
HMV	3540
JARS	
SAFETY JOINT	
PACKER	3545
PACKER	3550
DEPTH	3551
ANCHOR 5'perf	3556
5' "	3561
Alpine@3553	
Ak-1 @3563	
2'perf	3563
BULLNOSE 3'bullplug	3566
T.D.	3566

TEST HISTORY

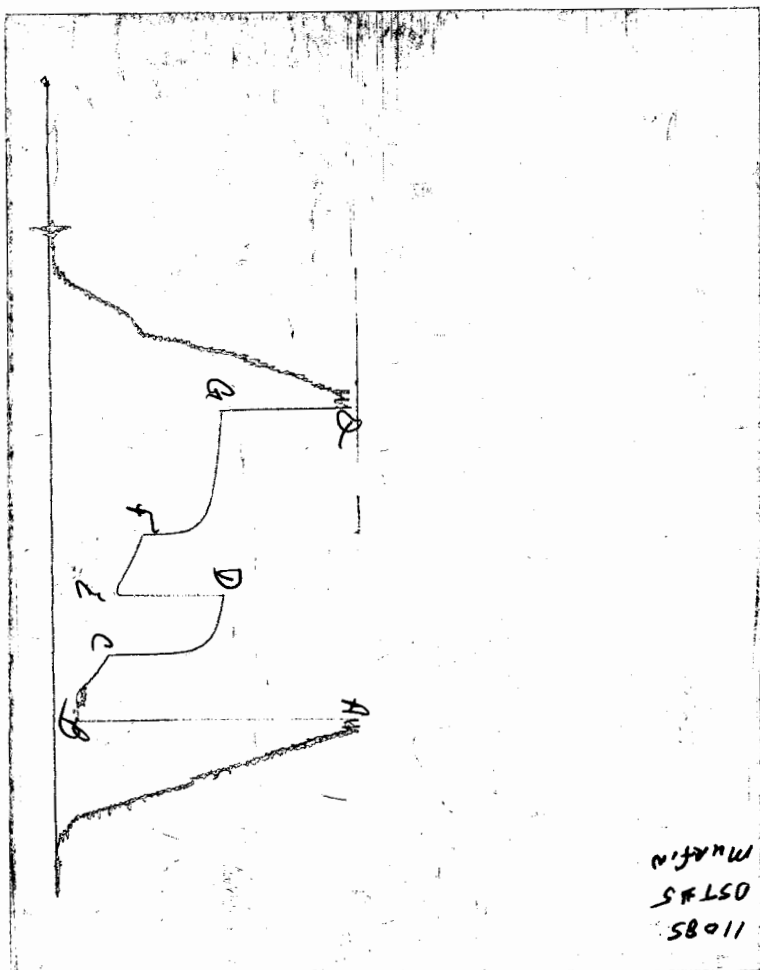
12944 DST#5 Glinther-Hagen Unit# 1-17 Murfin Drilling Co., Inc.



Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1703.58
B:	0.00	91.49
C:	30.00	329.65
D:	43.50	997.32
E:	0.00	340.29
F:	44.50	528.70
G:	91.00	996.00
H:	0.00	1714.48

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 12944

Test Ticket

Well Name & No.	<u>GINNTER-HAYN Unit #1-17</u>	Test No.	<u>5</u>	Date	<u>4-2-00</u>
Company	<u>MURFIN DRILLING Co., Inc.</u>	Zone Tested	<u>Arbuckle</u>		
Address	<u>250 N. WATER, Suite 300 WICHITA, KS 67202</u>	Elevation	<u>2005</u>	KB	<u>2000</u> GL
Co. Rep / Geo.	<u>Randy Killian</u>	Cont.	<u>Murfin 8</u>	Est. Ft. of Pay	<u>-</u> Por. <u>-</u> %
Location: Sec.	<u>17</u>	Twp.	<u>11^S</u>	Rge.	<u>19^W</u> Co. <u>ELLIS</u> State <u>Ks</u>
No. of Copies	<u>Req</u>	Distribution Sheet (Y, N)	<u>-</u>	Turnkey (Y, N)	<u>-</u> Evaluation (Y, N) <u>-</u>

Interval Tested	<u>3550-3566</u>	Initial Str Wt./Lbs.	<u>47000</u>	Unseated Str Wt./Lbs.	<u>48000</u>
Anchor Length	<u>16</u>	Wt. Set Lbs.	<u>20000</u>	Wt. Pulled Loose/Lbs.	<u>55000</u>
Top Packer Depth	<u>3545</u>	Tool Weight	<u>2000</u>		
Bottom Packer Depth	<u>3550</u>	Hole Size — 7 7/8"	<u>yes</u>	Rubber Size — 6 3/4"	<u>yes</u>
Total Depth	<u>3566</u>	Wt. Pipe Run	<u>-</u>	Drill Collar Run	<u>240</u>
Mud Wt.	<u>9.1</u> LCM <u>TR</u> Vis. <u>47</u> WL <u>9.2</u>	Drill Pipe Size	<u>4 1/2 XH</u>	Ft. Run	<u>3320</u>
Blow Description	<u>IFP - WEAK TO A STRONG BLOW IN 3 min</u> <u>FFP - WEAK TO A STRONG BLOW IN 9 min</u> <u>NO BLOW ON SHUT-IN</u>				

Recovery — Total Feet	<u>1000</u>	GIP	<u>-</u>	Ft. in DC	<u>240</u>	Ft. in DP	<u>760</u>
Rec.	<u>5</u>	Feet Of	<u>CO</u>	%gas	<u>-</u>	%oil	<u>-</u>
Rec.	<u>335</u>	Feet Of	<u>50CW</u>	%gas	<u>2</u>	%oil	<u>98</u>
Rec.	<u>660</u>	Feet Of	<u>WATER</u>	%gas	<u>-</u>	%oil	<u>-</u>
Rec.		Feet Of		%gas	<u>-</u>	%oil	<u>-</u>
Rec.		Feet Of		%gas	<u>-</u>	%oil	<u>-</u>
BHT	<u>113</u>	°F Gravity	<u>-</u>	°API D@	<u>-</u>	°F Corrected Gravity	<u>-</u>
RW	<u>.27</u> @ <u>68</u>	°F Chlorides	<u>28000</u>	ppm Recovery	<u>-</u>	Chlorides	<u>8600</u>

(A) Initial Hydrostatic Mud	<u>1722</u>	AK-1	<u>1703</u>	Alpine	PSI	Recorder No.	<u>3027</u>	T-On Location	<u>1200</u>
(B) First Initial Flow Pressure	<u>99</u>		<u>91</u>		PSI	(depth)	<u>3553</u>	T-Started	<u>1237</u>
(C) First Final Flow Pressure	<u>308</u>		<u>329</u>		PSI	Recorder No.	<u>11085</u>	T-Open	<u>1433</u>
(D) Initial Shut-In Pressure	<u>1006</u>		<u>997</u>		PSI	(depth)	<u>3563</u>	T-Pulled	<u>1803</u>
(E) Second Initial Flow Pressure	<u>363</u>		<u>340</u>		PSI	Recorder No.	<u>-</u>	T-Out	<u>2027</u>
(F) Second Final Flow Pressure	<u>517</u>		<u>528</u>		PSI	(depth)	<u>-</u>	T-Off Location	<u>2050</u>
(G) Final Shut-in Pressure	<u>984</u>		<u>996</u>		PSI	Initial Opening	<u>30</u>	Test	<u>✓</u>
(Q) Final Hydrostatic Mud	<u>1701</u>		<u>1714</u>		PSI	Initial Shut-in	<u>45</u>	Jars	<u>100</u>
						Final Flow	<u>45</u>	Safety Joint	<u>-</u>
						Final Shut-in	<u>90</u>	Straddle	<u>-</u>

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Approved By _____

Our Representative RAY SCHWAGER Thank you

Circ. Sub _____
Sampler _____
Extra Packer _____
Elec. Rec. ✓ 150
Mileage _____
Other 1 hr 30
TOTAL PRICE \$ ✓ 780

TRILOBITE TESTING L.L.C.

OPERATOR : Murfin Drilling Co., Inc
WELL NAME: Giinther-Hagen Unit #1-17
LOCATION : 17-11s-19w Ellis co KS
INTERVAL : 3574.00 To 3588.00 ft

DATE 4-3-00
KB 2005.00 ft TICKET NO: 12945 DST #6
GR 2000.00 ft FORMATION: Arbuckle
TD 3588.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	11085	11085	3027			PF Fr. 0638 to 0708 hr
SI 45 Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0	IS Fr. 0708 to 0753 hr
SF 60 Clock(hrs)	12hr	12hr	elec			SF Fr. 0753 to 0853 hr
FS 90 Depth(ft)	3585.0	3585.0	3576.0	0.0	0.0	FS Fr. 0853 to 1023 hr

	Field	1	2	3	4	
A. Init Hydro	1733.0	1757.0	1782.0	0.0	0.0	T STARTED 0436 hr
B. First Flow	77.0	58.0	24.0	0.0	0.0	T ON BOTM 0635 hr
B1. Final Flow	132.0	117.0	122.0	0.0	0.0	T OPEN 0638 hr
C. In Shut-in	1180.0	1147.0	1160.0	0.0	0.0	T PULLED 1023 hr
D. Init Flow	154.0	154.0	118.0	0.0	0.0	T OUT 1229 hr
E. Final Flow	198.0	193.0	191.0	0.0	0.0	
F. Fl Shut-in	1180.0	1165.0	1153.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1722.0	1737.0	1732.0	0.0	0.0	Tool Wt. 2000.00 lbs
Inside/Outside	o	o	i			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 54000.00 lbs
						Initial Str Wt 46000.00 lbs
						Unseated Str Wt 47000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.78 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 240.00 ft
						D.P. Length 3320.00 ft

RECOVERY

Tot Fluid 450.00 ft of 240.00 ft in DC and 210.00 ft in DP
330.00 ft of Clean oil
0.00 ft of 100% oil
120.00 ft of Oil cut muddy water
0.00 ft of 10% oil 70% water 20% mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of

SALINITY 28000.00 P.P.M. A.P.I. Gravity 24.00

BLOW DESCRIPTION

Initial Flow:

Weak to fair blow 1/2" to 4" blow.

Final Flow:

Weak blow throughout 1/4" to 1 1/2" blow.

Final Shut-In:

No blow.

SAMPLES:

SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.10 lb/cf
Vis.	47.00 S/L
W.L.	9.20 in3
F.C.	0.00 in
Mud Drop	

Amt. of fill	0.00 ft
Btm. H. Temp.	111.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	
Tester	Ray Schwager
Co. Rep.	Randy Killian
Contr.	Murfin Drlg.
Rig #	8
Unit #	
Pump T.	

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Giinther-Hagen Unit #1-17

LOCATION : 17-11s-19w Ellis co KS

TICKET No. 12945 D.S.T. No. 6 DATE 4-3-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 14

TOTAL TOOL 34

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY

D.C. ABOVE TOOLS.Stands4 Single Total 240

D.P. ABOVE TOOLS.Stands53 Single 1 Total 3320

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3594

TOTAL DEPTH 3588

TOTAL DRILL PIPE ABOVE K.B. 6

REMARKS:

P.O. SUB	3432
C.O. SUB	3554
S.I. TOOL	3559
HMV	3564
JARS	
SAFETY JOINT	
PACKER	3569
PACKER	3574
DEPTH	3575
ANCHOR 5'perf	3580
Alpine@3576	
Ak-1 @3585	
5'perf	3585
BULLNOSE 3'bullplug	3588
T.D.	3588

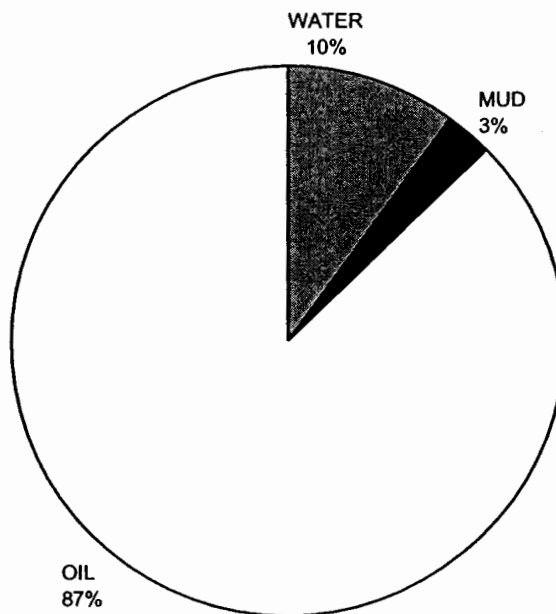
CALCULATED RECOVERY ANALYSIS

DST 6

TICKET 12945

SAMPLE #		TOTAL		GAS		OIL		WATER		MUD	
		FEET	%	FEET	%	FEET	%	FEET	%	FEET	%
DRILL PIPE	1	210	0	0	100	210	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0	0	0
WEIGHT PIPE	1	0	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0	0
DRILL COLLARS	1	120	0	0	100	120	0	0	0	0	0
	2	120	0	0	10	12	70	84	20	24	
	3	0	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0	0
TOTAL		450	0	0	0	342	0	84	0	24	

			HRS OPEN		BBL/DAY
BBL OIL=	3.63168	*	1.5	=	58.10688
BBL WATER=	0.41076	*		=	6.57216
BBL MUD=	0.11736				
BBL GAS =	0				

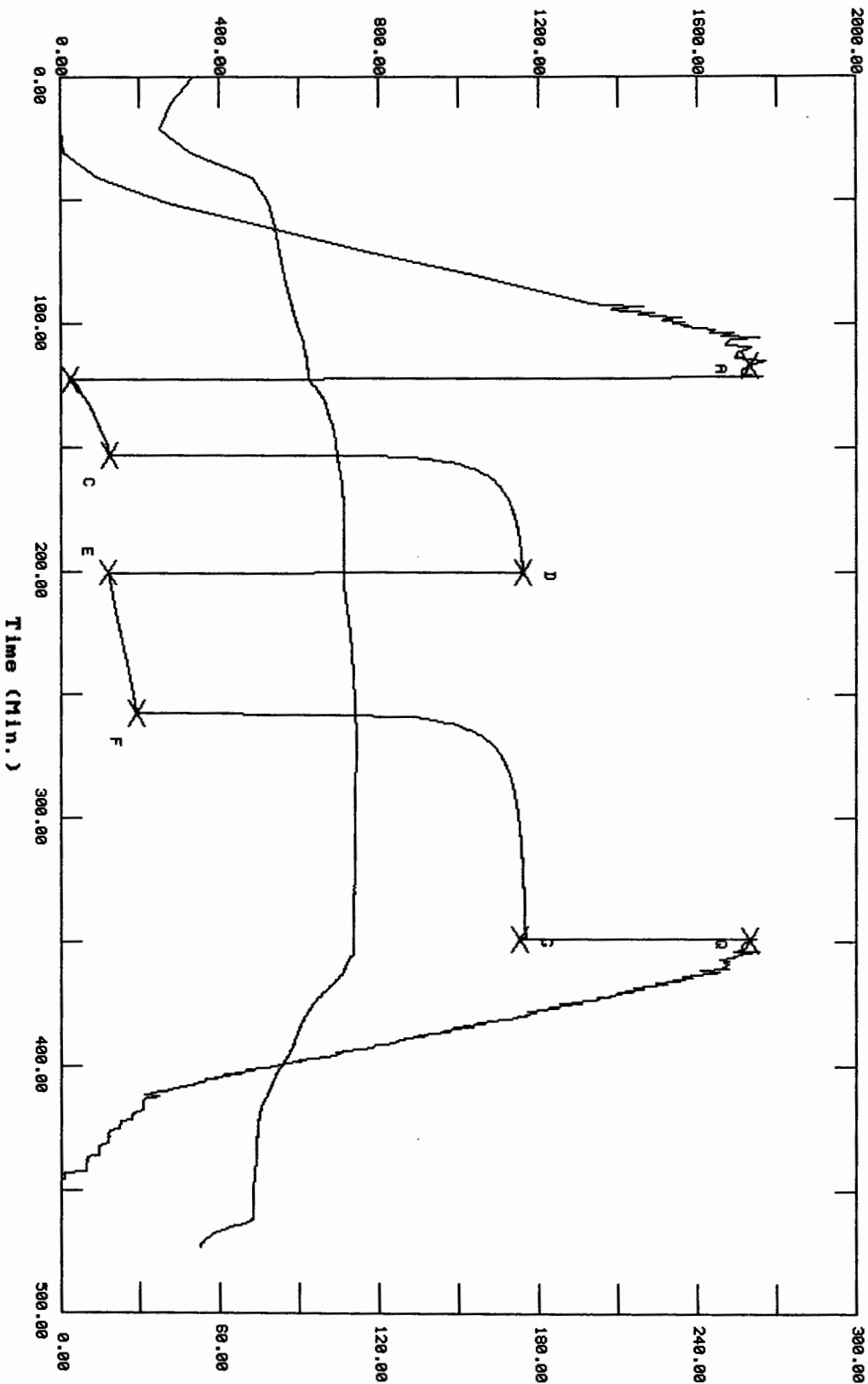


TEST HISTORY

12945 DST#6 Glinther-Hagen Unit #1-17 Murfin Drilling Co., Inc.

Flag Points
(Min.) PK (PSig)

A:	0.00	1732.70
B:	0.00	24.04
C:	30.50	122.13
D:	47.00	1160.08
E:	0.00	118.59
F:	57.50	191.14
G:	90.50	1153.11
H:	0.00	1732.04

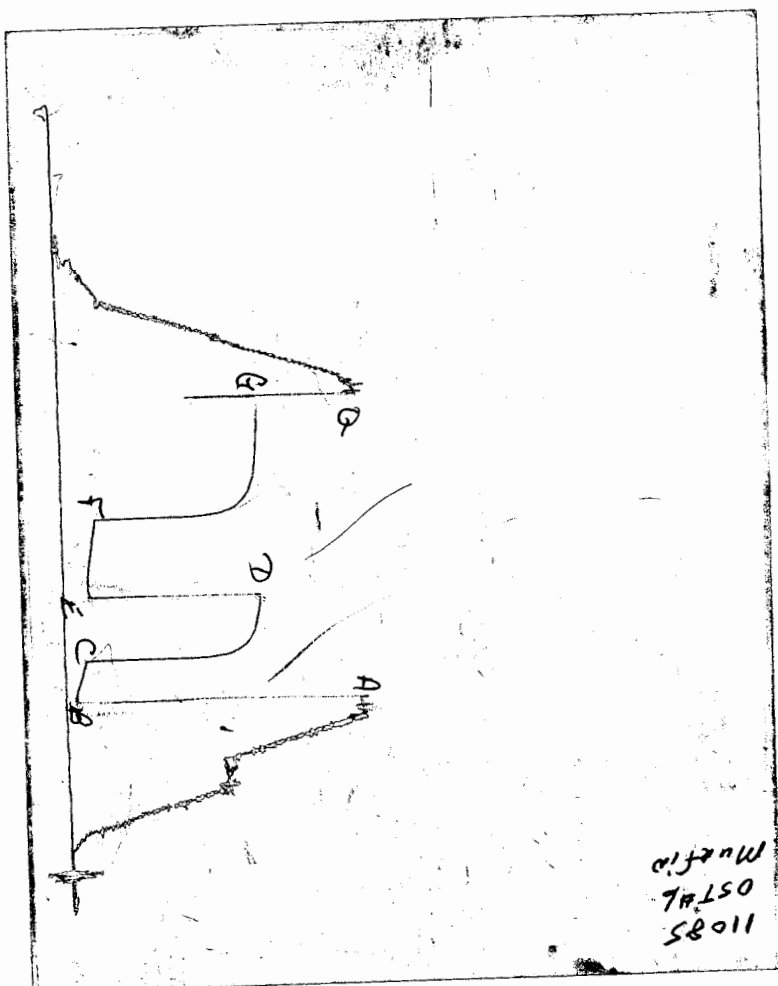


Temperature (DEG F)

Pressure (PSig)

Time (Min.)

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 12945

Test Ticket

Well Name & No.	<u>Günther-Hagen Unit #1-17</u>	Test No.	<u>6</u>	Date	<u>4-3-00</u>
Company	<u>Murfin Drilling Co., Inc.</u>	Zone Tested	<u>Arbuckle</u>		
Address	<u>250 N. WATER, SUITE 300 WICHITA, KS 67202</u>	Elevation	<u>2005</u>	KB	<u>2000</u> GL
Co. Rep / Geo.	<u>Randy Killian</u>	Cont.	<u>Murfin 8</u>	Est. Ft. of Pay	<u>—</u> Por. <u>—</u> %
Location: Sec.	<u>17</u>	Twp.	<u>11^s</u>	Rge.	<u>19^w</u> Co. <u>Ellis</u> State <u>Ks</u>
No. of Copies	<u>Reg</u>	Distribution Sheet (Y, N)	<u>—</u>	Turnkey (Y, N)	<u>—</u> Evaluation (Y, N) <u>—</u>

Interval Tested	<u>3574-3588</u>	Initial Str Wt./Lbs.	<u>46000</u>	Unseated Str Wt./Lbs.	<u>47000</u>
Anchor Length	<u>14</u>	Wt. Set Lbs.	<u>20000</u>	Wt. Pulled Loose/Lbs.	<u>54000</u>
Top Packer Depth	<u>3569</u>	Tool Weight	<u>2000</u>		
Bottom Packer Depth	<u>3574</u>	Hole Size — 7 7/8"	<u>yes</u>	Rubber Size — 6 3/4"	<u>yes</u>
Total Depth	<u>3588</u>	Wt. Pipe Run	<u>—</u>	Drill Collar Run	<u>240</u>
Mud Wt. <u>9.1</u> LCM <u>TR</u> Vis. <u>47</u> WL <u>9.2</u>		Drill Pipe Size	<u>4 1/2 XH</u>	Ft. Run	<u>3320</u>
Blow Description	<u>IFP - WEAK TO A FAIR BLOW 1/2" To 4" BLOW</u> <u>FFP - WEAK BLOW THROUGHOUT 1/4" To 1 1/2" BLOW</u> <u>NO BLOW ON SHUT-IN</u>				

Recovery — Total Feet	<u>450</u>	GIP	<u>—</u>	Ft. in DC	<u>240</u>	Ft. in DP	<u>210</u>
Rec. <u>330</u>	Feet Of	<u>CO</u>	%gas	%oil	%water	%mud	
Rec. <u>120</u>	Feet Of	<u>OCMW</u>	%gas	<u>10</u> %oil	<u>70</u> %water	<u>20</u> %mud	
Rec. <u>—</u>	Feet Of	<u>—</u>	%gas	%oil	%water	%mud	
Rec. <u>—</u>	Feet Of	<u>—</u>	%gas	%oil	%water	%mud	
Rec. <u>—</u>	Feet Of	<u>—</u>	%gas	%oil	%water	%mud	
BHT <u>111</u>	°F Gravity	<u>24</u>	°API D@	<u>60</u>	°F Corrected Gravity	<u>24</u>	°API
RW <u>.27</u>	@	<u>68</u>	°F Chlorides	<u>28000</u>	ppm Recovery	Chlorides <u>8600</u>	ppm System

	AK-1	Alpine					
(A) Initial Hydrostatic Mud	<u>1733</u>	<u>1782</u>	PSI	Recorder No.	<u>3027</u>	T-On Location	<u>0415</u>
(B) First Initial Flow Pressure	<u>77</u>	<u>24</u>	PSI	(depth)	<u>3576</u>	T-Started	<u>0436</u>
(C) First Final Flow Pressure	<u>132</u>	<u>122</u>	PSI	Recorder No.	<u>11085</u>	T-Open	<u>0638</u>
(D) Initial Shut-In Pressure	<u>1180</u>	<u>1160</u>	PSI	(depth)	<u>3585</u>	T-Pulled	<u>1023</u>
(E) Second Initial Flow Pressure	<u>154</u>	<u>118</u>	PSI	Recorder No.	<u>—</u>	T-Out	<u>1229</u>
(F) Second Final Flow Pressure	<u>198</u>	<u>191</u>	PSI	(depth)	<u>—</u>	T-Off Location	<u>—</u>
(G) Final Shut-in Pressure	<u>1180</u>	<u>1153</u>	PSI	Initial Opening	<u>30</u>	Test	<u>✓ 600</u>
(Q) Final Hydrostatic Mud	<u>1722</u>	<u>1732</u>	PSI	Initial Shut-in	<u>45</u>	Jars	<u>—</u>
				Final Flow	<u>60</u>	Safety Joint	<u>—</u>
				Final Shut-in	<u>90</u>	Straddle	<u>—</u>

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Approved By —

Our Representative RAY SCHWAGER Thank you

Extra Packer —
Elec. Rec. ✓ 150
Mileage —
Other 1 hr 30
TOTAL PRICE \$ ✓ 780