TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name HINEMAN "A" #1 Test No. 1 Date 8/20/93

Company ARGENT ENERGY, INC. Zone KS CITY

Address 110 S MAIN #510 WICHITA KS 67202 Elevation 2769

Co. Rep./Geo. SCOTT OATSDEAN Cont. L.D. DAVIS RIG #1 Est. Ft. of Pay 6

Location: Sec. 5 Twp. 19S Rge. 28W Co. LANE State KS

Interval Tested 4154-4180

Anchor Length 26

Top Packer Depth 4149

Bottom Packer Depth 4154

Total Depth 4180

Drill Pipe Size 4.5 XH

Wt. Pipe I.D. - 2.7 Ft. Run

Drill Collar – 2.25 Ft. Run

Mud Wt. 9.1 lb/Gal.

Viscosity 44 Filtrate

Tool Open @ 5:00 AM Initial Blow WEAK SURFACE BLOW BUILT TO 2.5"

Final Blow WEAK SURFACE RETURN SLOWLY BUILT TO 3"

Recovery - Total Feet 90 Flush Tool? NO

Rec. 30 Feet of GAS IN PIPE

Rec. 20 Feet of CLEAN GASSY OIL-10% GAS/ 90% OIL

Rec. 70 Feet of GASSY MUD CUT OIL-10% GAS/ 60% OIL/ 30% MUD

Rec. Feet of

Rec. Feet of

BHT 112 °F Gravity 34 °API @ 76 °F Corrected Gravity 32.6 °API

RW @ °F Chlorides ppm Recovery Chlorides ppm System

(A) Initial Hydrostatic Mud 2035.0 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure 81.1 PSI @ (depth) 4170 w / Clock No. 25810

(C) First Final Flow Pressure 70.7 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-in Pressure 1069.2 PSI @ (depth) 4175 w / Clock No. 22992

(E) Second Initial Flow Pressure 114.3 PSI AK1 Recorder No. Range

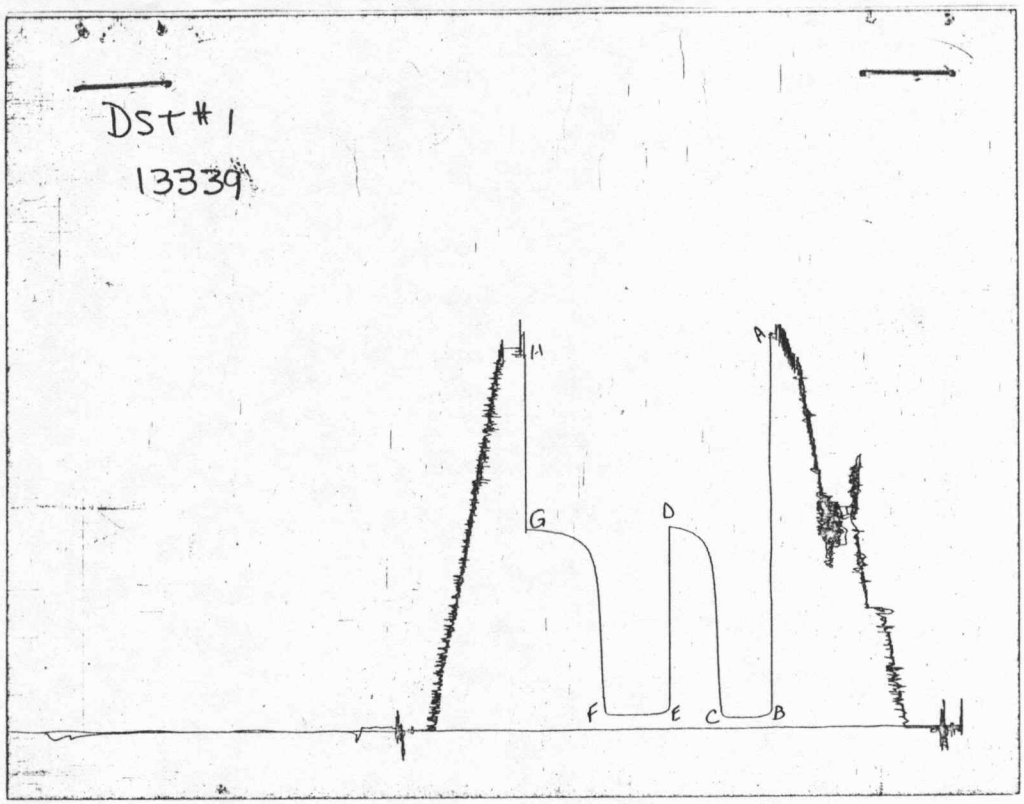
(F) Second Final Flow Pressure 87.3 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 1058.2 PSI Initial Opening 30 Final Flow 45

(H) Final Hydrostatic Mud 1997.0 PSI Initial Shut-in 45 Final Shut-in 60

Our Representative ROD STEINBRINK

CHART PAGE



This is an actual photograph of recorder chart

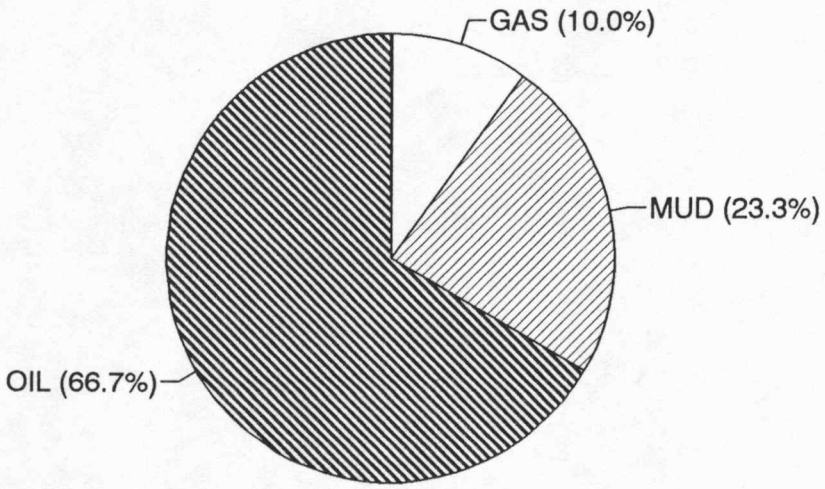
	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2023	2035
(B) FIRST INITIAL FLOW PRESSURE	62	81.1
(C) FIRST FINAL FLOW PRESSURE	62	70.7
(D) INITIAL CLOSED-IN PRESSURE	1060	1069.2
(E) SECOND INITIAL FLOW PRESSURE	83	114.3
(F) SECOND FINAL FLOW PRESSURE	83	87.3
(G) FINAL CLOSED-IN PRESSURE	1060	1058.2
(H) FINAL HYDROSTATIC MUD	2003	1997

CALCULATED RECOVERY ANALYSIS DRILL PIPE

DST # 1 TICKET 6199

SAMPLE	TOTAL	GAS		OIL		WATER		MUD	
#	FEET	%	FEET	%	FEET	%	FEET	%	FEET
1	20	10	2	90	18	0	0	0	0
2	70	10	7	60	42	0	0	30	21
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	90	10	9	66.7	60	0	0	23.3	21

			HRS	BBL/DAY
BBL OIL=	0.8532	*	1.25	16.381
BBL WATER=	0	*		0
BBL MUD=	0.29862			
BBL GAS	0.12798			



INITIAL FLOW

RECORDER 13339 DST # 1

TIME(MIN)	PRESSURE	<> PRESSURE
0	81.1	81.1
3	75.8	-5.3
6	70.7	-5.1
9	70.7	0.0
12	70.7	0.0
15	70.7	0.0
18	70.7	0.0
21	70.7	0.0
24	70.7	0.0
27	70.7	0.0
30	70.7	0.0

FINAL FLOW

RECORDER 13339 DST # 1

TIME(MIN)	PRESSURE	<> PRESSURE
0	114.3	114.3
3	100.8	-13.5
6	93.6	-7.2
9	91.5	-2.1
12	89.4	-2.1
15	87.3	-2.1
18	87.3	0.0
21	87.3	0.0
24	87.3	0.0
27	87.3	0.0
30	87.3	0.0
33	87.3	0.0
36	87.3	0.0
39	87.3	0.0
42	87.3	0.0
45	87.3	0.0

HINEMAN "A" #1 DST #1
INITIAL SHUTIN

30 INITIAL FLOW TIME

SLOPE
P*

PSI/CYCLE
PSI

TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
3	77.9	1.041	77.9	11
6	137.2	0.778	59.3	6
9	523.0	0.637	385.8	4
12	835.6	0.544	312.6	4
15	927.8	0.477	92.2	3
18	974.9	0.426	47.1	3
21	1003.0	0.385	28.1	2
24	1021.0	0.352	18.0	2
27	1034.1	0.325	13.1	2
30	1044.1	0.301	10.0	2
33	1052.2	0.281	8.1	2
36	1058.2	0.263	6.0	2
39	1062.2	0.248	4.0	2
42	1066.2	0.234	4.0	2
45	1069.2	0.222	3.0	2

HINEMAN "A" #1 DST #1
FINAL SHUTIN

75 TOTAL FLOW TIME

	Pws (psi)	SLOPE P* Log Horn T	<> PRESSURE	PSI/CYCLE PSI Horn T
3	179.3	1.415	179.3	26
6	647.3	1.130	468.0	14
9	839.6	0.970	192.3	9
12	911.8	0.860	72.2	7
15	960.9	0.778	49.1	6
18	979.9	0.713	19.0	5
21	996.0	0.660	16.1	5
24	1009.0	0.615	13.0	4
27	1019.0	0.577	10.0	4
30	1028.1	0.544	9.1	4
33	1034.1	0.515	6.0	3
36	1039.1	0.489	5.0	3
39	1041.1	0.466	2.0	3
42	1045.1	0.445	4.0	3
45	1048.2	0.426	3.1	3
48	1051.2	0.409	3.0	3
51	1055.2	0.393	4.0	2
54	1056.2	0.378	1.0	2
57	1058.2	0.365	2.0	2
60	1058.2	0.352	0.0	2

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 6199

Well Name & No. Hineman 'A' #1 Test No. 1 Date 8-20-93

Company Argent Energy, Inc. Zone Tested ~~Lans~~/ KC 140'

Address 110 S. Main Suite 810 Wichita, KS. 67202 Elevation 2769 (KB)

Co. Rep./Geo. Scott Oatsdean Cont. L.D. Davis # Est. Ft. of Pay 6'

Location: Sec. 5 Twp. 19 S Rge. 28 W Co. Lane State KS.

No. of Copies 3 Distribution Sheet ____ Yes X No Turnkey ____ Yes ____ No ____ Evaluation

Interval Tested 4154 - 4180 Drill Pipe Size 4½" XH

Anchor Length 26' Top Choke — 1" ____ Bottom Choke — ¾" ____

Top Packer Depth 4149 Hole Size — 7⅞" ____ Rubber Size — 6¾" ____

Bottom Packer Depth 4154 Wt. Pipe I.D. — 2.7 Ft. Run —

Total Depth 4180 Drill Collar — 2.25 Ft. Run —

Mud Wt. 9.1 lb / gal. Viscosity 44 Filtrate ____

Tool Open @ 5:00 am Initial Blow Weak surface blow built to 2½"

Final Blow Weak surface return slowly built to 3"

Recovery — Total Feet 90' Feet of Gas in Pipe 30' Flush Tool? No

Rec. ____	Feet Of ____	%gas	%oil	%water	%mud
Rec. 20'	Feet Of CGO	10 %gas	90 %oil	%water	%mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud
Rec. 70'	Feet Of MCO	10 %gas	60 %oil	%water	30 %mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud

BHT 112° °F Gravity 34 °API @ 76° °F Corrected Gravity 32.6 °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides ____ ppm System

Initial Hydrostatic Mud	2023 PSI	AK1 Recorder No.	13309	Range	4700
First Initial Flow Pressure	62 PSI	@ (depth)	4170	w/Clock No.	25810
First Final Flow Pressure	62 PSI	AK1 Recorder No.	13339	Range	4025
Initial Shut-In Pressure	1060 PSI	@ (depth)	4175	w/Clock No.	22992
Second Initial Flow Pressure	83 PSI	AK1 Recorder No.	—	Range	—
Second Final Flow Pressure	83 PSI	@ (depth)	—	w/Clock No.	—
Final Shut-In Pressure	1060 PSI	Initial Opening	30	Test	
Final Hydrostatic Mud	2003 PSI	Initial Shut-In	45	Jars	
		Final Flow	45	Safety Joint	X
		Final Shut-In	60	Straddle	
				Circ. Sub	X N/C
				Sampler	
				Extra Packer	
				Other	
				TOTAL PRICE $	

Approved By Scott A Oatsdean

Our Representative Rod Steinbrink

Printcraft Printers - Hays, KS

WELL NAME Hilderman H #1 DST # 1 RECORDER # 13339

INIT. HYD. MUD 2012 2035.0 FINAL HYD. MUD 1974 1997.0

INITIAL FLOW MINUTES 30 INTERVAL 3 | INITIAL SHUTIN MINUTES 45 INTERVAL 3 | FINAL FLOW MINUTES 45 INTERVAL 3 | FINAL SHUTIN MINUTES 60 INTERVAL 3

78	81.1	68	70.7	1	110	114.3	84	873
73	75.8	75	77.9	2	97	100.8	173	17[illegible]
68	70.7	132	133.2	3	90	93.6	628	647.3
		504	523.0	4	88	91.5	820	839.6
		816	835.0	5	86	89.4	892	911.8
		908	927.8	6	84	87.3	941	960.9
		952	971.9	7			960	979.9
		983	1003.0	8			976	996.0
		1001	1021.0	9			989	1009.0
		1014	1034.1	10			999	1019.0
68	70.7	1024	1044.1	11			1008	1028.1
		1032	1052.2	12			1014	1034.1
		1038	1058.2	13			1019	1039.1
		1042	1062.2	14			1021	1041.1
		1046	1066.2	15			1025	1045.1
		1049	1069.2	16	84	87.3	1028	1048.2
				17			1031	1051.2
				18			1035	1055.2
				19			1036	1056.2
				20			1038	1058.2
				21			1038	1058.2
				22				
				23				
				24				
				25				
				26				
				27				

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name HINEMAN "A" #1 Test No. 2 Date 8/20/93

Company ARGENT ENERGY, INC. Zone KS CITY

Address 110 S MAIN #510 WICHITA KS 67202 Elevation 2769

Co. Rep./Geo. SCOTT OATSDEAN Cont. L.D. DAVIS RIG #1 Est. Ft. of Pay

Location: Sec. 5 Twp. 19S Rge. 28W Co. LANE State KS

Interval Tested 4191-4230 Drill Pipe Size 4.5 XH

Anchor Length 39 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 4186 Drill Collar – 2.25 Ft. Run

Bottom Packer Depth 4191 Mud Wt. 9.3 lb/Gal.

Total Depth 4230 Viscosity 42 Filtrate

Tool Open @ 7:15 PM Initial Blow WEAK SURFACE BLOW SLOWLY BUILT TO 3"

Final Blow VERY WEAK SURFACE BLOW AFTER 15 MINUTES STAYING STEADY

Recovery - Total Feet 90 Flush Tool? NO

Rec. 20 Feet of OIL CUT MUD-10% OIL/ 90% MUD

Rec. 70 Feet of WATERY MUD-20% WTR/ 80% MUD

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 115 °F Gravity °API @ °F Corrected Gravity °API

RW 0.46 @ 80 °F Chlorides 12000 ppm Recovery Chlorides ppm System

(A) Initial Hydrostatic Mud 2070.0 PSI AK1 Recorder No. 13339 Range 4025

(B) First Initial Flow Pressure 40.2 PSI @ (depth) 4220 w / Clock No. 22992

(C) First Final Flow Pressure 41.3 PSI AK1 Recorder No. 13276 Range 4000

(D) Initial Shut-in Pressure 522.4 PSI @ (depth) 4225 w / Clock No. 26191

(E) Second Initial Flow Pressure 70.7 PSI AK1 Recorder No. Range

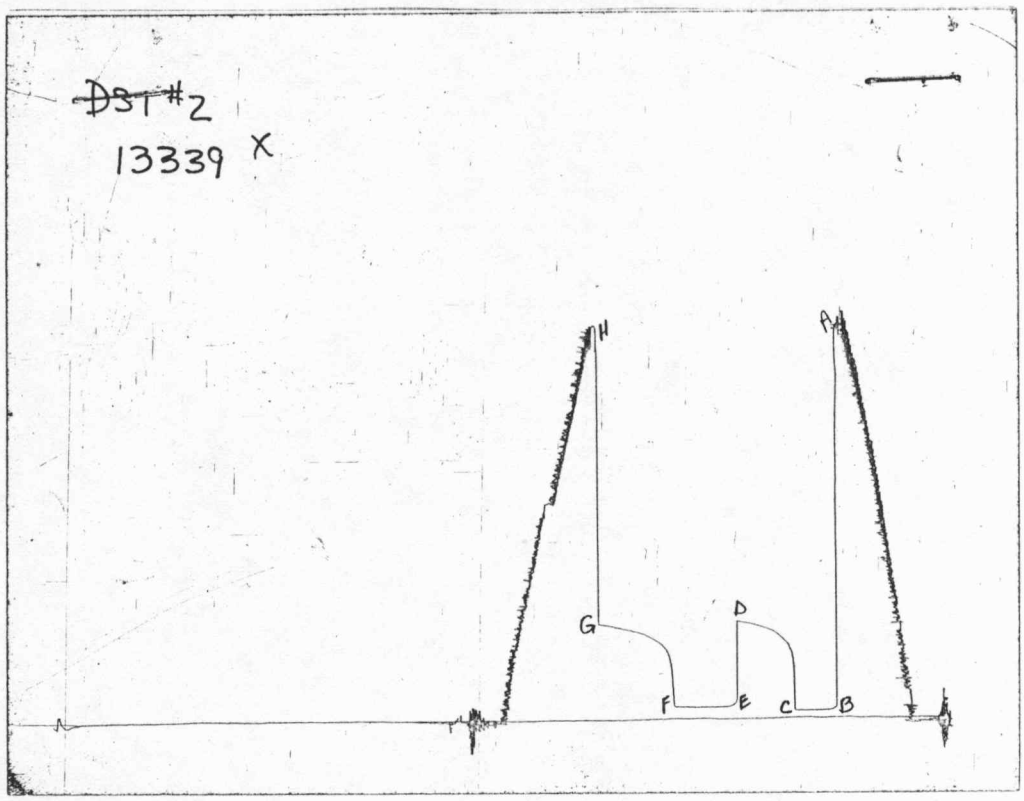
(F) Second Final Flow Pressure 70.7 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 513.6 PSI Initial Opening 30 Final Flow 45

(H) Final Hydrostatic Mud 2050.0 PSI Initial Shut-in 45 Final Shut-in 60

Our Representative ROD STEINBRINK

CHART PAGE



This is an actual photograph of recorder chart

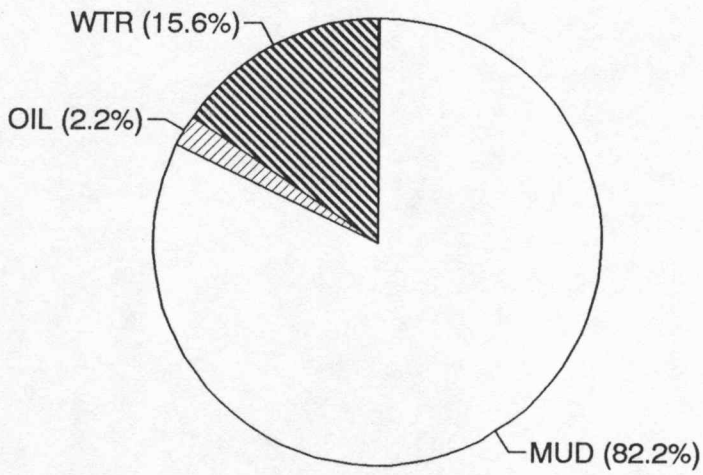
	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2073	2070
(B) FIRST INITIAL FLOW PRESSURE	41	40.2
(C) FIRST FINAL FLOW PRESSURE	41	41.3
(D) INITIAL CLOSED-IN PRESSURE	519	522.4
(E) SECOND INITIAL FLOW PRESSURE	63	70.7
(F) SECOND FINAL FLOW PRESSURE	63	70.7
(G) FINAL CLOSED-IN PRESSURE	509	513.6
(H) FINAL HYDROSTATIC MUD	2053	2050

CALCULATED RECOVERY ANALYSIS DRILL PIPE

DST # 2 TICKET 6200

SAMPLE	TOTAL	GAS		OIL		WATER		MUD	
#	FEET	%	FEET	%	FEET	%	FEET	%	FEET
1	20	0	0	10	2	0	0	90	18
2	70	0	0	0	0	20	14	80	56
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	90	0	0	2.22	2	15.555556	14	82.2	74

			HRS	BBL/DAY
BBL OIL=	0.02844	*	1.25	0.546
BBL WATER=	0.19908	*		3.8223
BBL MUD=	1.05228			
BBL GAS	0			



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 6200

Well Name & No. Hineman 'A' #1 Test No. 2 Date 8-20-93

Company Argent Energy, Inc. Zone Tested KC. 160'

Address 110 S. Main Suite 810 Wichita, KS. 67202 Elevation 2769 (KB)

Co. Rep./Geo. Scott Oatsdean Cont. L.D. Davis #1 Est. Ft. of Pay

Location: Sec. 5 Twp. 19 S Rge. 28 W Co. Lane State KS.

No. of Copies 3 Distribution Sheet Yes X No Turnkey Yes X No Evaluation

Interval Tested 4191 - 4230 Drill Pipe Size 4½" XH

Anchor Length 39' Top Choke — 1" Bottom Choke — ¾"

Top Packer Depth 4186 Hole Size — 7⅞" Rubber Size — 6¾"

Bottom Packer Depth 4191 Wt. Pipe I.D. — 2.7 Ft. Run —

Total Depth 4230 Drill Collar — 2.25 Ft. Run —

Mud Wt. 9.3 lb / gal. Viscosity 42 Filtrate

Tool Open @ 7:15 pm Initial Blow Weak surface blow slowly built to 3"

Final Blow Very weak surface blow after 15 mins staying steady

Recovery — Total Feet 90' Feet of Gas in Pipe — Flush Tool? No

Rec.		Feet Of		%gas		%oil		%water	%mud
Rec.	20'	Feet Of	OCM	%gas	—	%oil	10	%water	90 %mud
Rec.		Feet Of		%gas		%oil		%water	%mud
Rec.	70'	Feet Of	Watery Mud	%gas	—	%oil	—	%water	20 %mud
Rec.		Feet Of		%gas		%oil		%water	%mud

BHT 115 °F Gravity °API @ °F Corrected Gravity °API

RW .46 @ 80 °F Chlorides 12,000 ppm Recovery Chlorides ppm System

(A) Initial Hydrostatic Mud 2073 PSI AK1 Recorder No. 13339 Range 4025

(B) First Initial Flow Pressure 41 PSI @ (depth) 4220 w/Clock No. 22992

(C) First Final Flow Pressure 41 PSI AK1 Recorder No. 13276 Range 4000

(D) Initial Shut-In Pressure 519 PSI @ (depth) 4225 w/Clock No. 26191

(E) Second Initial Flow Pressure 63 PSI AK1 Recorder No. — Range —

(F) Second Final Flow Pressure 63 PSI @ (depth) — w/Clock No. —

(G) Final Shut-In Pressure 509 PSI Initial Opening 30 Test

(H) Final Hydrostatic Mud 2053 PSI Initial Shut-In 45 Jars

Final Flow 45 Safety Joint X

Final Shut-In 60 Straddle

Circ. Sub X N/C

Sampler

Extra Packer

Other

TOTAL PRICE $

Approved By Scott A Oatsdean

Our Representative Rod Steinbrink

Printcraft Printers - Hays, KS

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name HINEMAN "A" #1 Test No. 3 Date 8/21/93

Company ARGENT ENERGY, INC. Zone KS CITY

Address 110 S MAIN #510 WICHITA KS 67202 Elevation 2769

Co. Rep./Geo. SCOTT OATSDEAN Cont. L.D. DAVIS RIG #1 Est. Ft. of Pay 6

Location: Sec. 5 Twp. 19S Rge. 28W Co. LANE State KS

Interval Tested 4233-4240 Drill Pipe Size 4.5 XH

Anchor Length 7 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 4228 Drill Collar – 2.25 Ft. Run

Bottom Packer Depth 4233 Mud Wt. 9.2 lb/Gal.

Total Depth 4240 Viscosity 48 Filtrate

Tool Open @ 8:32 AM Initial Blow FAIR TO STRONG BLOW OFF BOTTOM IN 4 MINUTES

ISI: BLED OFF BLOW - SURFACE RETURN BUILT TO 2"

Final Blow FAIR TO STRONG RETURN OFF BOTTOM IN 5 MINUTES

FSI: BLED OFF BLOW - SURFACE BLOW 10 MIN INTO STEADY THRGOUHOUT

Recovery - Total Feet 1045 Flush Tool? NO

Rec. 65 Feet of GAS IN PIPE

Rec. 55 Feet of CLEAN GASSY OIL-10% GAS/ 90% OIL

Rec. 90 Feet of GSY OIL & MUD CUT WATER-5% GAS/ 15% OIL/ 50% WTR/ 30%

Rec. 900 Feet of SLTLY GSY SALT WATER-5% GAS/ 95% WATER

Rec. Feet of

BHT N/A °F Gravity 39.4 °API @ 94 °F Corrected Gravity 36.4 °API

RW 0.16 @ 90 °F Chlorides 34000 ppm Recovery Chlorides 3000 ppm System

(A) Initial Hydrostatic Mud 2070.0 PSI AK1 Recorder No. 13339 Range 4025

(B) First Initial Flow Pressure 70.7 PSI @ (depth) 4219 w / Clock No. 22992

(C) First Final Flow Pressure 274.6 PSI AK1 Recorder No. 13276 Range 4000

(D) Initial Shut-in Pressure 623.8 PSI @ (depth) 4235 w / Clock No. 26191

(E) Second Initial Flow Pressure 380.5 PSI AK1 Recorder No. Range

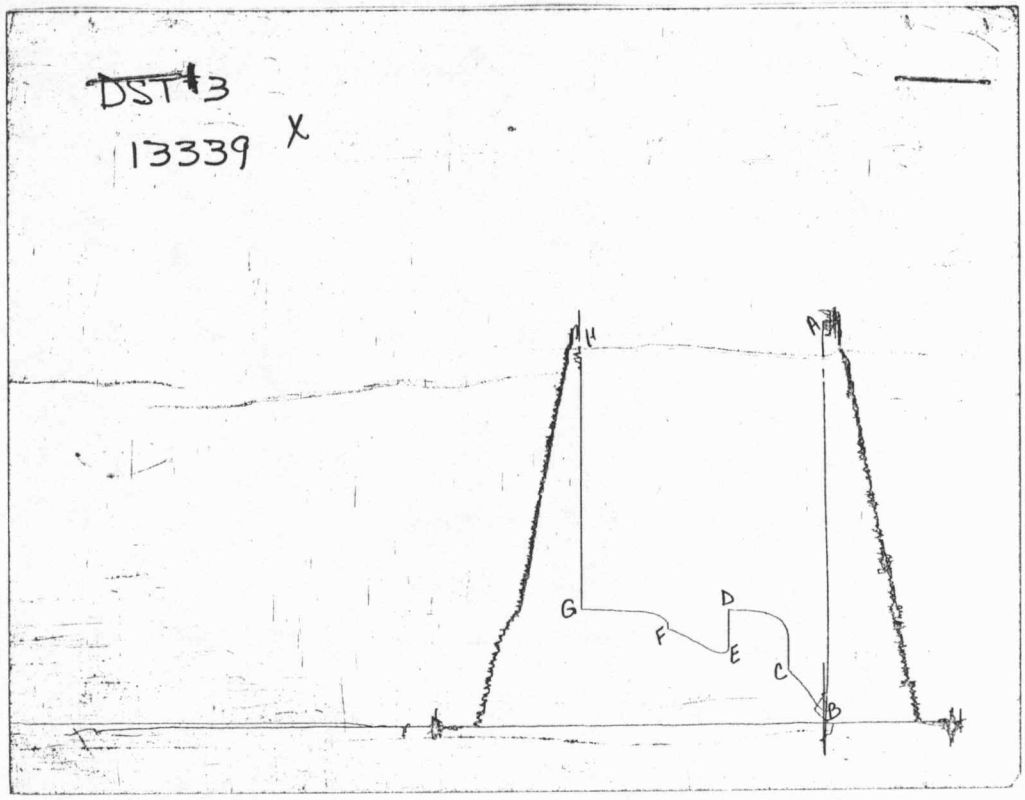
(F) Second Final Flow Pressure 513.6 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 623.8 PSI Initial Opening 30 Final Flow 45

(H) Final Hydrostatic Mud 2050.0 PSI Initial Shut-in 45 Final Shut-in 60

Our Representative ROD STEINBRINK

CHART PAGE



This is an actual photograph of recorder chart

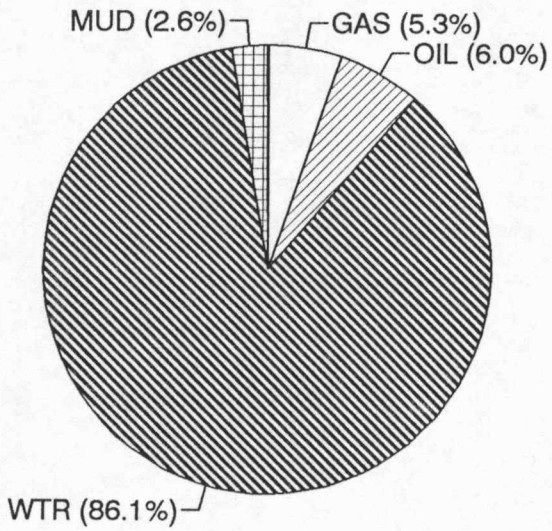
	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2063	2070
(B) FIRST INITIAL FLOW PRESSURE	72	70.7
(C) FIRST FINAL FLOW PRESSURE	270	274.6
(D) INITIAL CLOSED-IN PRESSURE	619	623.8
(E) SECOND INITIAL FLOW PRESSURE	384	380.5
(F) SECOND FINAL FLOW PRESSURE	509	513.6
(G) FINAL CLOSED-IN PRESSURE	619	623.8
(H) FINAL HYDROSTATIC MUD	2053	2050

CALCULATED RECOVERY ANALYSIS DRILL PIPE

DST # 3 TICKET 6201

SAMPLE	TOTAL	GAS		OIL		WATER		MUD	
#	FEET	%	FEET	%	FEET	%	FEET	%	FEET
1	55	10	5.5	90	49.5	0	0	0	0
2	90	5	4.5	15	13.5	50	45	30	27
3	900	5	45	0	0	95	855	0	0
4			0		0		0		0
5			0		0		0		0
TOTAL	1045	5.2631579	55	6.03	63	86.124402	900	2.58	27

			HRS	BBL/DAY
BBL OIL=	0.89586	*	1.25	17.201
BBL WATER=	12.798	*		245.72
BBL MUD=	0.38394			
BBL GAS	0.7821			



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 6201

Well Name & No. Hineman 'A' #1 Test No. 3 Date 8-21-93

Company Argent Energy, Inc. Zone Tested KC. 180'

Address 110 S. Main Suite 810 Wichita, KS. 67202 Elevation 2769 (KB)

Co. Rep./Geo. Scott Oatsdean Cont. L.D. Davis #1 Est. Ft. of Pay 6'

Location: Sec. 5 Twp. 19 S Rge. 28 W Co. Lane State KS.

No. of Copies 3 Distribution Sheet ___ Yes X No Turnkey ___ Yes X No ___ Evaluation

Interval Tested 4233 - 4240 Drill Pipe Size 4½" XH

Anchor Length 7' Top Choke — 1" ___ Bottom Choke — ¾" ___

Top Packer Depth 4228 Hole Size — 7⅞" ___ Rubber Size — 6¾" ___

Bottom Packer Depth 4233 Wt. Pipe I.D. — 2.7 Ft. Run —

Total Depth 4240 Drill Collar — 2.25 Ft. Run —

Mud Wt. 9.2 lb/gal. Viscosity 48 Filtrate ___

Tool Open @ 8:32 am Initial Blow Fair to strong blow off bottom in 4 mins.

ISI: Bled off blow - surface return built to 2"

Final Blow Fair to strong return off bottom in 5 mins.

FSI: Bled off blow - surface blow 10 mins into steady throughout.

Recovery — Total Feet 1045' Feet of Gas in Pipe 65' Flush Tool? No

Rec. 55'	Feet Of	CGO	10	%gas	90	%oil	—	%water	— %mud
Rec. ___	Feet Of			%gas		%oil		%water	%mud
Rec. 90'	Feet Of	GOMCW	5	%gas	15	%oil	50	%water	30 %mud
Rec. ___	Feet Of			%gas		%oil		%water	%mud
Rec. 900'	Feet Of	Salt Water	5	%gas	—	%oil	95	%water	— %mud

BHT ___ °F Gravity 39.4 °API @ 94° °F Corrected Gravity 36.4 °API

RW .16 @ 90° °F Chlorides 34,000 ppm Recovery Chlorides 3,000 ppm System

(A) Initial Hydrostatic Mud	2063 PSI	AK1 Recorder No.	13339	Range	4025
(B) First Initial Flow Pressure	72 PSI	@ (depth)	4219	w/Clock No.	22992
(C) First Final Flow Pressure	270 PSI	AK1 Recorder No.	13276	Range	4000
(D) Initial Shut-In Pressure	619 PSI	@ (depth)	4235	w/Clock No.	26191
(E) Second Initial Flow Pressure	384 PSI	AK1 Recorder No.	—	Range	—
(F) Second Final Flow Pressure	509 PSI	@ (depth)	—	w/Clock No.	—
(G) Final Shut-In Pressure	619 PSI	Initial Opening	30	Test	
(H) Final Hydrostatic Mud	2053 PSI	Initial Shut-In	45	Jars	
		Final Flow	45	Safety Joint	X
		Final Shut-In	60	Straddle	
				Circ. Sub	X N/C
				Sampler	
				Extra Packer	
				Other	
				TOTAL PRICE $	

Approved By Scott A Oatsdean

Our Representative Rod Steinbrink

Printcraft Printers - Hays, KS

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name HINEMAN "A" #1 Test No. 4 Date 8/21/93

Company ARGENT ENERGY, INC. Zone KS CITY

Address 110 S MAIN #510 WICHITA KS 67202 Elevation 2769

Co. Rep./Geo. SCOTT OATSDEAN Cont. L.D. DAVIS RIG #1 Est. Ft. of Pay 6

Location: Sec. 5 Twp. 19S Rge. 28W Co. LANE State KS

Interval Tested 4255-4275 Drill Pipe Size 4.5 XH

Anchor Length 20 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 4250 Drill Collar – 2.25 Ft. Run

Bottom Packer Depth 4255 Mud Wt. lb/Gal.

Total Depth 4275 Viscosity Filtrate

Tool Open @ 10:45 PM Initial Blow STRONG BLOW OFF BOTTOM IN 1 1/2 MINUTES

ISI: BLED OFF BLOW - SURFACE RETURN OFF BOTTOM IN 20 MINUTES

Final Blow FAIR TO STRONG BLOW OFF BOTTOM IN 2 1/2 MINUTES

FSI: BLED OFF BLOW - NO RETURN

Recovery - Total Feet 2120 Flush Tool? NO

Rec. 930 Feet of GAS IN PIPE

Rec. 2120 Feet of CLEAN GASSY OIL-35% GAS/ 65% OIL

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 115 °F Gravity 38 °API @ 62 °F Corrected Gravity 37.8 °API

RW @ °F Chlorides ppm Recovery Chlorides ppm System

(A) Initial Hydrostatic Mud 2158.3 PSI AK1 Recorder No. 13339 Range 4025

(B) First Initial Flow Pressure 110.2 PSI @ (depth) 4265 w / Clock No. 22992

(C) First Final Flow Pressure 472.9 PSI AK1 Recorder No. 13276 Range 4000

(D) Initial Shut-in Pressure 866.7 PSI @ (depth) 4270 w / Clock No. 26191

(E) Second Initial Flow Pressure 579.1 PSI AK1 Recorder No. Range

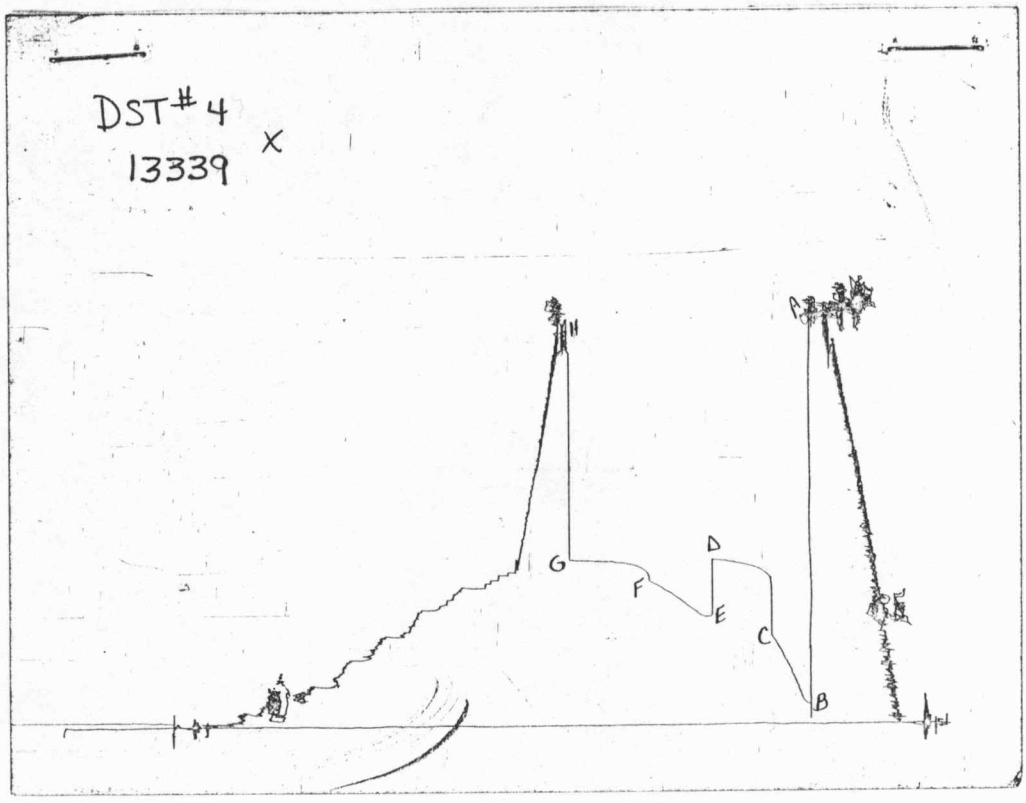
(F) Second Final Flow Pressure 749.5 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 867.7 PSI Initial Opening 30 Final Flow 45

(H) Final Hydrostatic Mud 2121.2 PSI Initial Shut-in 45 Final Shut-in 60

Our Representative ROD STEINBRINK

CHART PAGE



This is an actual photograph of recorder chart

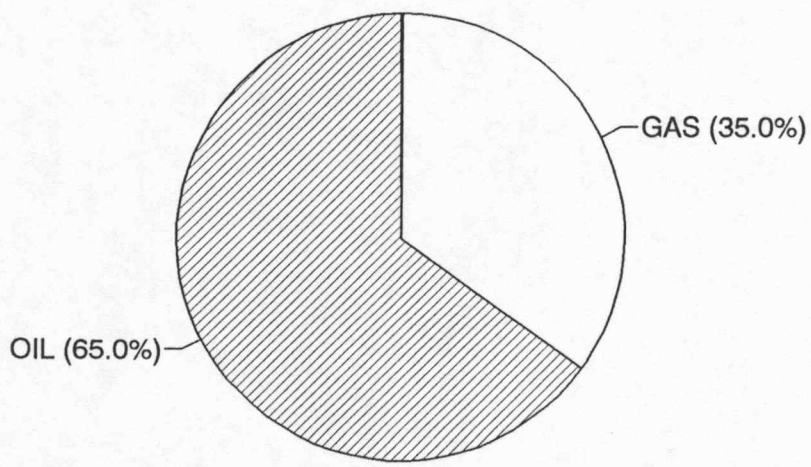
	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2143	2158.3
(B) FIRST INITIAL FLOW PRESSURE	104	110.2
(C) FIRST FINAL FLOW PRESSURE	457	472.9
(D) INITIAL CLOSED-IN PRESSURE	869	866.7
(E) SECOND INITIAL FLOW PRESSURE	569	579.1
(F) SECOND FINAL FLOW PRESSURE	749	749.5
(G) FINAL CLOSED-IN PRESSURE	869	867.7
(H) FINAL HYDROSTATIC MUD	2113	2121.2

CALCULATED RECOVERY ANALYSIS DRILL PIPE

DST # 4 TICKET 6202

SAMPLE #	TOTAL FEET	GAS %	GAS FEET	OIL %	OIL FEET	WATER %	WATER FEET	MUD %	MUD FEET
1	2120	35	742	65	1378	0	0	0	0
2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	2120	35	742	65	1378	0	0	0	0

			HRS	BBL/DAY
BBL OIL=	19.59516	*	1.25	376.23
BBL WATER=	0	*		0
BBL MUD=	0			
BBL GAS	10.55124			



INITIAL FLOW

RECORDER 13339 DST # 4

TIME(MIN)	PRESSURE	<> PRESSURE
0	110.2	110.2
3	116.4	6.2
6	141.4	25.0
9	187.1	45.7
12	243.2	56.1
15	283.7	40.5
18	329.5	45.8
21	368.0	38.5
24	408.5	40.5
27	441.7	33.2
30	472.9	31.2

FINAL FLOW

RECORDER 13339 DST # 4

TIME(MIN)	PRESSURE	<> PRESSURE
0	579.1	579.1
3	577.1	-2.0
6	579.1	2.0
9	587.1	8.0
12	603.2	16.1
15	618.2	15.0
18	630.2	12.0
21	647.3	17.1
24	662.3	15.0
27	676.3	14.0
30	689.3	13.0
33	702.4	13.1
36	713.4	11.0
39	728.4	15.0
42	738.4	10.0
45	749.5	11.1

HINEMAN "A" #1 DST #4
INITIAL SHUTIN

30 INITIAL FLOW TIME

SLOPE P* | PSI/CYCLE PSI

TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
3	787.5	1.041	787.5	11
6	804.6	0.778	17.1	6
9	819.6	0.637	15.0	4
12	827.6	0.544	8.0	4
15	835.6	0.477	8.0	3
18	840.6	0.426	5.0	3
21	845.7	0.385	5.1	2
24	849.7	0.352	4.0	2
27	852.7	0.325	3.0	2
30	856.7	0.301	4.0	2
33	858.7	0.281	2.0	2
36	861.7	0.263	3.0	2
39	864.7	0.248	3.0	2
42	866.7	0.234	2.0	2
45	866.7	0.222	0.0	2

HINEMAN "A" #1 DST #4
FINAL SHUTIN

75 TOTAL FLOW TIME

	Pws (psi)	SLOPE P* Log Horn T	<> PRESSURE	PSI/CYCLE PSI Horn T
3	813.6	1.415	813.6	26
6	829.6	1.130	16.0	14
9	838.6	0.970	9.0	9
12	844.6	0.860	6.0	7
15	847.7	0.778	3.1	6
18	852.7	0.713	5.0	5
21	853.7	0.660	1.0	5
24	854.7	0.615	1.0	4
27	857.7	0.577	3.0	4
30	859.7	0.544	2.0	4
33	860.7	0.515	1.0	3
36	861.7	0.489	1.0	3
39	862.7	0.466	1.0	3
42	863.7	0.445	1.0	3
45	864.7	0.426	1.0	3
48	865.7	0.409	1.0	3
51	866.7	0.393	1.0	2
54	866.7	0.378	0.0	2
57	867.7	0.365	1.0	2
60	867.7	0.352	0.0	2

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 6202

Well Name & No. Hineman 'A' #1 Test No. 4 Date 8-21-93

Company Argent Energy, Inc. Zone Tested KC 200'

Address 110 S. Main Suite 810 Wichita, KS. 67202 Elevation 2769 (KB)

Co. Rep./Geo. Scott Oatsdean Cont. L.D. Davis #1 Est. Ft. of Pay 6'

Location: Sec. 5 Twp. 19 S Rge. 28 W Co. Lane State KS.

No. of Copies 3 Distribution Sheet ____ Yes X No Turnkey ____ Yes X No ____ Evaluation

Interval Tested 4255 - 4275 Drill Pipe Size 4½" XH

Anchor Length 20' Top Choke — 1" ____ Bottom Choke — ¾" ____

Top Packer Depth 4250 Hole Size — 7⅞" ____ Rubber Size — 6¾" ____

Bottom Packer Depth 4255 Wt. Pipe I.D. — 2.7 Ft. Run —

Total Depth 4275 Drill Collar — 2.25 Ft. Run —

Mud Wt. ____ lb/gal. Viscosity ____ Filtrate ____

Tool Open @ 10:45 pm Initial Blow Strong blow off bottom in 1½ mins.

ISI: Bled off blow - Surface return off bottom in 20 mins.

Final Blow Fair to strong blow off bottom in 2½ mins.

FSI: Bled off blow - no return

Recovery — Total Feet 2120' Feet of Gas in Pipe 930' Flush Tool? No

Rec. ____	Feet Of ____	%gas	%oil	%water	%mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud
Rec. 2120'	Feet Of CGO	35 %gas	65 %oil	— %water	— %mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud

BHT 115° °F Gravity 38 °API @ 62° °F Corrected Gravity 37.8 °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides ____ ppm System

(A) Initial Hydrostatic Mud	2143 PSI	AK1 Recorder No.	13339	Range	4025
(B) First Initial Flow Pressure	104 PSI	@ (depth)	4265	w/Clock No.	22992
(C) First Final Flow Pressure	457 PSI	AK1 Recorder No.	13276	Range	4000
(D) Initial Shut-In Pressure	869 PSI	@ (depth)	4270	w/Clock No.	26191
(E) Second Initial Flow Pressure	569 PSI	AK1 Recorder No.	—	Range	—
(F) Second Final Flow Pressure	749 PSI	@ (depth)	—	w/Clock No.	—
(G) Final Shut-In Pressure	869 PSI	Initial Opening	30	Test	
(H) Final Hydrostatic Mud	2113 PSI	Initial Shut-In	45	Jars	
		Final Flow	45	Safety Joint	X
		Final Shut-In	60	Straddle	
				Circ. Sub	X N/C
				Sampler	
				Extra Packer	
				Other	
				TOTAL PRICE $	

Approved By Scott A Oatsdean

Our Representative Rod Steinbrink

Printcraft Printers - Hays, KS

NAME Hilcorp "B" #1 DST # 4 RECORDER # 13339

INIT. HYD. MUD 2098 FINAL HYD. MUD 2121.2

INITIAL FLOW MINUTES 45 INTERVAL 3 FINAL SHUTIN MINUTES 60 INTERVAL 3

						579.1	730	749.5
						577.1	794	813.6
						579.1	810	829.6
						583.1	819	838.6
						603.2	825	844.6
						618.2	828	847.7
						630.2	833	852.7
321	368.0			8		647.3	835	854.7
393	408.5	830	849.7	9	643	662.3	835	854.7
425	441.7	833	852.7	10	657	676.3	838	857.7
455	472.9	837	856.7	11	670	689.3	840	859.7
		839	858.7	12	683	702.4	842	861.7
		842	861.7	13	694	713.4	843	862.7
		845	864.7	14	709	728.4	843	862.7
		847	866.7	15	719	738.4	844	863.7
		847	866.7	16	730	749.5	845	864.7
				17			846	865.7
				18			847	866.7
				19			847	866.7
				20			848	867.7
				21			848	867.7
				22				
				23				
				24				
				25				
				26				
				27				

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 6203

Well Name & No. Hineman 'A' #1 Test No. 5 Date 8-22-93

Company Argent Energy, Inc. Zone Tested KC. Lwr 200'-220'

Address 110 S. Main Suite 810 Wichita, KS. 67202 Elevation 2769 (KB)

Co. Rep./Geo. Scott Datsdean Cont. L.D. Davis #1 Est. Ft. of Pay

Location: Sec. 5 Twp. 19S Rge. 28W Co. Lane State KS.

No. of Copies 3 Distribution Sheet Yes X No Turnkey Yes X No Evaluation

Interval Tested 4285 - 4315 Drill Pipe Size 4½" XH

Anchor Length 30' Top Choke — 1" Bottom Choke — ¾"

Top Packer Depth 4280 Hole Size — 7⅞" Rubber Size — 6¾"

Bottom Packer Depth 4285 Wt. Pipe I.D. — 2.7 Ft. Run —

Total Depth 4315 Drill Collar — 2.25 Ft. Run —

Mud Wt. lb/gal. Viscosity Filtrate

Tool Open @ 3:30 pm Initial Blow Weak surface blow steady throughout.

Final Blow No return blow.

Recovery — Total Feet 15' Feet of Gas in Pipe — Flush Tool? No

Rec.		Feet Of		%gas		%oil	%water	%mud
Rec.		Feet Of		%gas		%oil	%water	%mud
Rec.	15'	Feet Of	Thin Mud w/ show of oil	%gas	trc.	%oil	5 %water	95 %mud
Rec.		Feet Of		%gas		%oil	%water	%mud
Rec.		Feet Of		%gas		%oil	%water	%mud

BHT 115° °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides ppm System

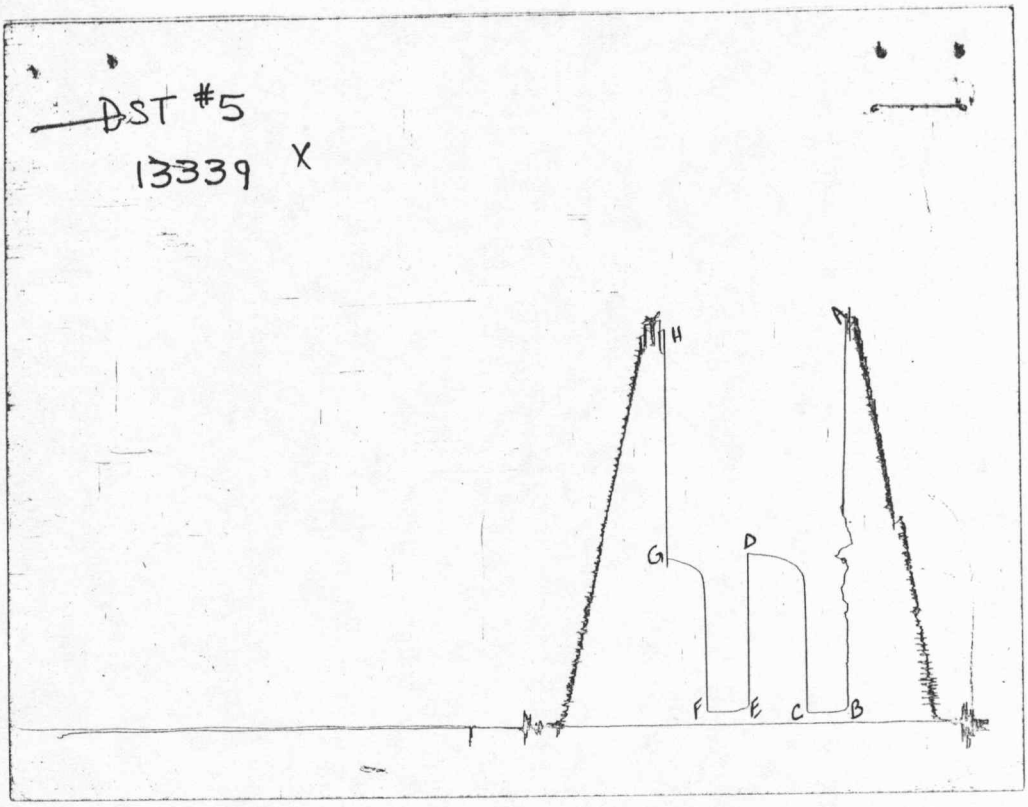
(A) Initial Hydrostatic Mud	2123 PSI	AK1 Recorder No.	13339	Range	4025
(B) First Initial Flow Pressure	52 PSI	@ (depth)	4300	w/Clock No.	26191
(C) First Final Flow Pressure	52 PSI	AK1 Recorder No.	13276	Range	4000
(D) Initial Shut-In Pressure	889 PSI	@ (depth)	4310	w/Clock No.	22992
(E) Second Initial Flow Pressure	62 PSI	AK1 Recorder No.	—	Range	—
(F) Second Final Flow Pressure	62 PSI	@ (depth)	—	w/Clock No.	—
(G) Final Shut-In Pressure	869 PSI	Initial Opening	30	Test	600
(H) Final Hydrostatic Mud	2113 PSI	Initial Shut-In	45	Jars	
		Final Flow	30	Safety Joint	X 50
		Final Shut-In	30	Straddle	
				Circ. Sub	X N/C
				Sampler	
				Extra Packer	
				Other	
				TOTAL PRICE $	650.00

Approved By Scott A Datsdean

Our Representative Rod Steinbrink

Printcraft Printers - Hays, KS

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2123	2133.6
(B) FIRST INITIAL FLOW PRESSURE	52	49.2
(C) FIRST FINAL FLOW PRESSURE	52	49.2
(D) INITIAL CLOSED-IN PRESSURE	889	894.2
(E) SECOND INITIAL FLOW PRESSURE	62	63.1
(F) SECOND FINAL FLOW PRESSURE	62	63.1
(G) FINAL CLOSED-IN PRESSURE	869	871.2
(H) FINAL HYDROSTATIC MUD	2113	2121.2

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name HINEMAN "A" #1 Test No. 5 Date 8/22/93

Company ARGENT ENERGY, INC. Zone KS CITY

Address 110 S MAIN #510 WICHITA KS 67202 Elevation 2769

Co. Rep./Geo. SCOTT OATSDEAN Cont. L.D. DAVIS RIG #1 Est. Ft. of Pay

Location: Sec. 5 Twp. 19S Rge. 28W Co. LANE State KS

Interval Tested 4285-4315 Drill Pipe Size 4.5 XH

Anchor Length 30 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 4280 Drill Collar – 2.25 Ft. Run

Bottom Packer Depth 4285 Mud Wt. lb/Gal.

Total Depth 4315 Viscosity Filtrate

Tool Open @ 3:30 PM Initial Blow WEAK SURFACE BLOW STEADY THROUGHOUT

Final Blow NO RETURN BLOW

Recovery - Total Feet 15 Flush Tool? NO

Rec. 15 Feet of THIN MUD WITH SHOW OF OIL-5% WTR/ 95% MUD

Rec. Feet of

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 115 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides ppm System

(A) Initial Hydrostatic Mud 2133.6 PSI AK1 Recorder No. 13339 Range 4025

(B) First Initial Flow Pressure 49.2 PSI @ (depth) 4300 w / Clock No. 26191

(C) First Final Flow Pressure 49.2 PSI AK1 Recorder No. 13276 Range 4000

(D) Initial Shut-in Pressure 894.2 PSI @ (depth) 4310 w / Clock No. 22992

(E) Second Initial Flow Pressure 63.1 PSI AK1 Recorder No. Range

(F) Second Final Flow Pressure 63.1 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 871.2 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 2121.2 PSI Initial Shut-in 45 Final Shut-in 30

Our Representative ROD STEINBRINK