

15-193-20649

4-10S-32W

WELL NAME: OHL Southwest #1-4
COMPANY: Landmark Exploration / Vess Oil Corp
LOCATION: 4-10S-32W
Thomas County Kansas
DATE: 05/25/96

TRILOBITE TESTING L.L.C.

OPERATOR : Landmark Exp/Vess Oil
WELL NAME: OHL Southwest #1-4
LOCATION : 4-10S-32W, Thomas Cty KS
INTERVAL : 4328.00 To 4370.00 ft

DATE 5-22-96
KB 3096.00 ft
GR 3091.00 ft
TD 4370.00 ft

TICKET NO: 9252
FORMATION: Lansing / KC "L"
TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	AK-1	AK-1	Alpine			PF Fr. 0228 to 0258 hr
SI 30 Range(Psi)	4025.0	4025.0	4995.0	0.0	0.0	IS Fr. 0258 to 0328 hr
SF 30 Clock(hrs)	12	12	Elect			SF Fr. 0328 to 0358 hr
FS 30 Depth(ft)	4365.0	4365.0	4342.0	0.0	0.0	FS Fr. 0358 to 0428 hr

	Field	1	2	3	4	
A. Init Hydro	2123.0	2127.0	2084.0	0.0	0.0	T STARTED 1240 hr
B. First Flow	20.0	48.0	20.0	0.0	0.0	T ON BOTM 0224 hr
Bl. Final Flow	20.0	48.0	20.0	0.0	0.0	T OPEN 0228 hr
C. In Shut-in	20.0	48.0	23.0	0.0	0.0	T PULLED 0428 hr
D. Init Flow	20.0	48.0	20.0	0.0	0.0	T OUT 0600 hr
E. Final Flow	20.0	48.0	20.0	0.0	0.0	
F. Fl Shut-in	20.0	48.0	22.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2103.0	2119.0	2035.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 30000.00 lbs
						Wt Pulled Loose 70000.00 lbs
						Initial Str Wt 46000.00 lbs
						Unseated Str Wt 46000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 0.00 ft
						D.P. Length 4325.00 ft

RECOVERY

Tot Fluid 1.00 ft of 0.00 ft in DC and 1.00 ft in DP
1.00 ft of Drilling mud w/ oil stains in tool

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

BLOW DESCRIPTION

Initial Flow -
Weak surface blow died in 15 min

Final Flow -
No return blow

MUD DATA-----

Mud Type	Chemical
Weight	9.20 lb/c
Vis.	42.00 S/L
W.L.	8.00 in3
F.C.	0.00 in
Mud Drop N	

Amt. of fill	0.00 ft
Btm. H. Temp.	124.00 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	ROD STEINBRINK
Co. Rep.	CRAIG
Contr.	L.D.DAVIS
Rig #	1
Unit #	
Pump T.	

SAMPLES:
SENT TO:

Test Successful: Y

9252 DST#1 OHL SOUTHWEST#1-4 LANDMARK/USS TEST HISTORY

Flag Points

t (Min.) P (PSig)

A:	0.00	2083.50
B:	0.00	19.80
C:	30.00	19.72
D:	29.00	22.98
E:	0.00	19.75
F:	29.00	19.97
G:	31.00	22.26
Q:	0.00	2034.69

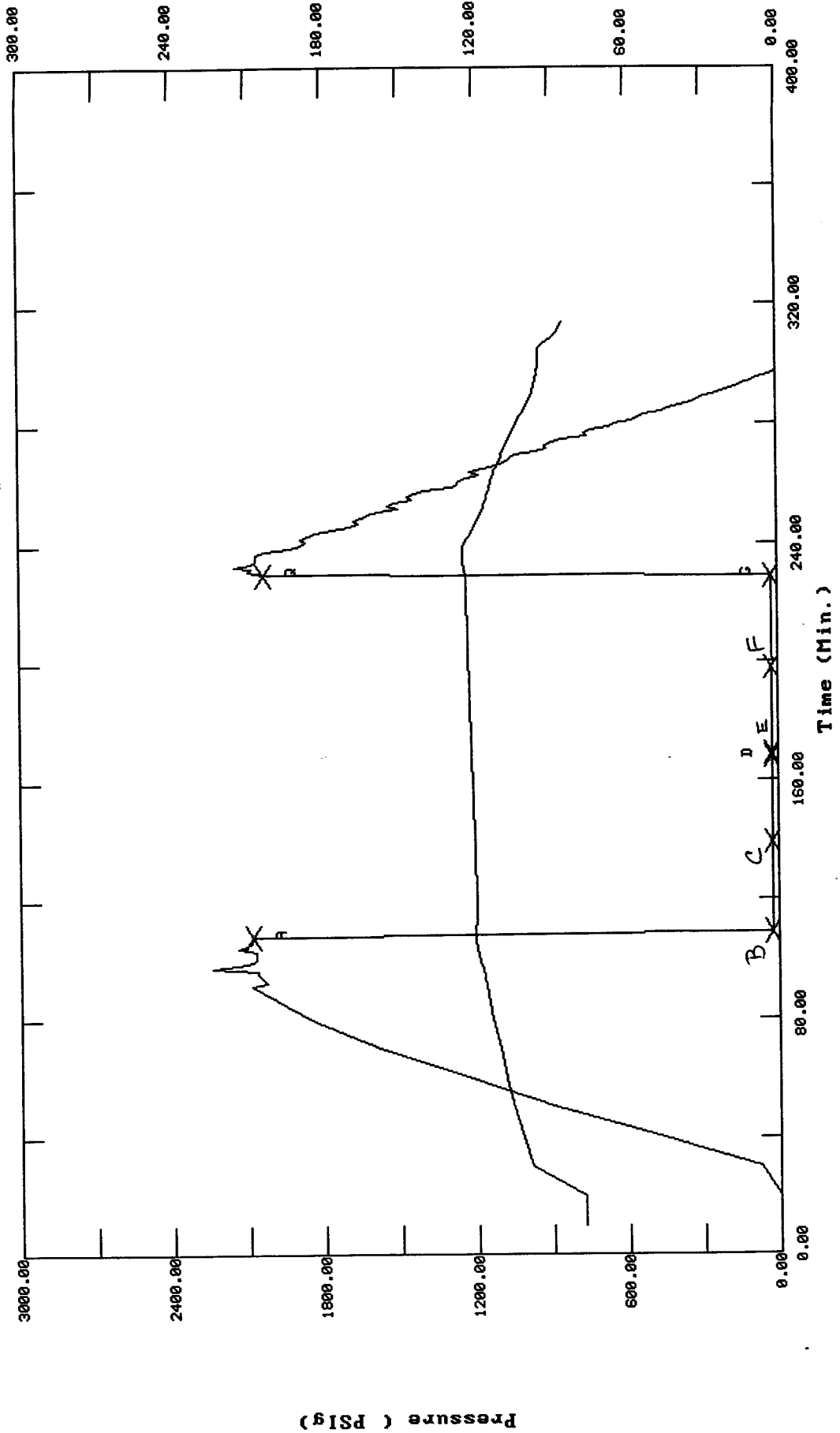
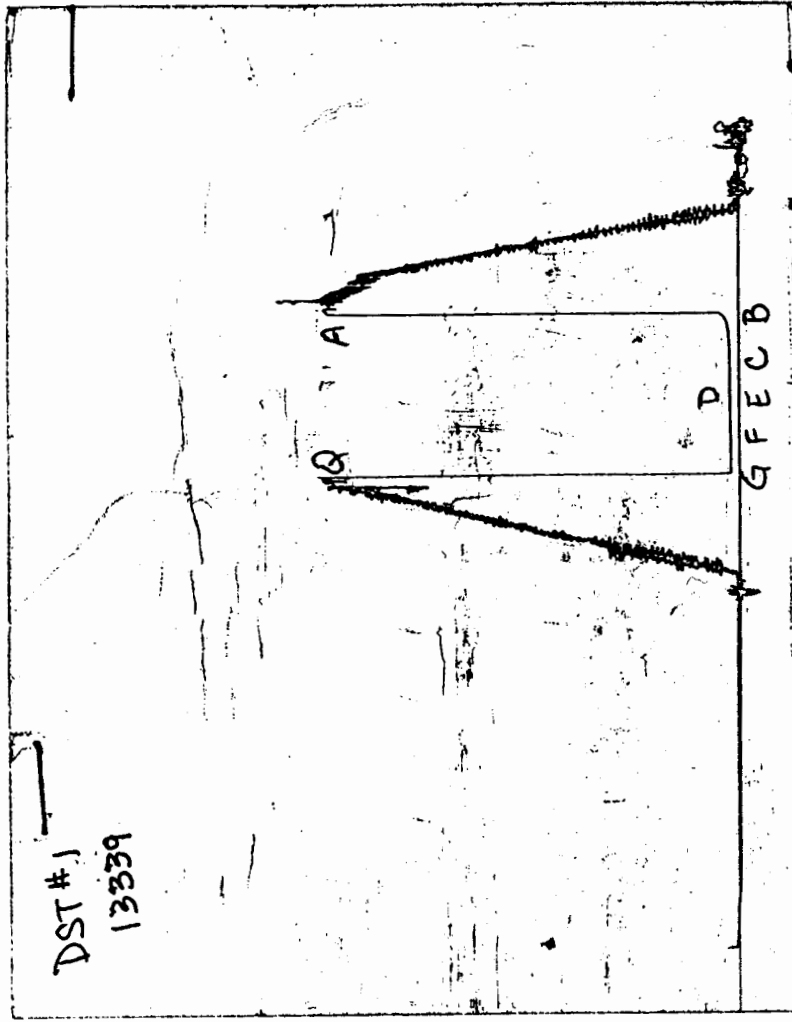


CHART PAGE



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

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING
 TEST: 9252 DST#1 OHL SOUTHWEST#1-4 LANDMARK/VESS
 DATE: 05/22/96 TIME: 12:40:33

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	108.00	2083.5	0.0	120.40		
***** Start Flow 1	0.00	19.8	0.0	120.31		
	1.00	20.1	0.3	120.28		
	2.00	20.1	0.3	120.23		
	3.00	20.1	0.3	120.17		
	4.00	20.0	0.2	120.12		
	5.00	19.9	0.1	120.08		
	6.00	19.9	0.1	120.04		
	7.00	19.9	0.1	120.02		
	8.00	19.7	-0.1	120.01		
	9.00	19.8	0.0	120.00		
	10.00	19.7	-0.1	120.00		
	11.00	19.7	-0.1	120.01		
	12.00	19.7	-0.1	120.03		
	13.00	19.7	-0.2	120.05		
	14.00	19.6	-0.2	120.07		
	15.00	19.7	-0.2	120.09		
	16.00	19.7	-0.1	120.11		
	17.00	19.7	-0.2	120.14		
	18.00	19.7	-0.2	120.17		
	19.00	19.7	-0.2	120.20		
	20.00	19.6	-0.2	120.23		
	21.00	19.7	-0.1	120.25		
	22.00	19.7	-0.1	120.29		
	23.00	19.6	-0.2	120.33		
	24.00	19.7	-0.1	120.36		
	25.00	19.7	-0.1	120.39		
	26.00	19.7	-0.1	120.40		
	27.00	19.6	-0.2	120.42		
	28.00	19.7	-0.1	120.44		
	29.00	19.7	-0.1	120.44		
***** End Flow 1	30.00	19.7	-0.1	120.47		
***** Start Shutin 1	0.00	19.7	0.0	120.47	0.0000	0.000
	1.00	18.5	-1.2	120.53	31.0000	0.000
	2.00	18.7	-1.1	120.57	16.0000	0.000
	3.00	18.8	-0.9	120.62	11.0000	0.000
	4.00	19.0	-0.7	120.66	8.5000	0.000
	5.00	19.1	-0.6	120.68	7.0000	0.000
	6.00	19.3	-0.4	120.71	6.0000	0.000
	7.00	19.5	-0.2	120.74	5.2857	0.000
	8.00	19.6	-0.1	120.80	4.7500	0.000
	9.00	19.9	0.1	120.83	4.3333	0.000
	10.00	19.9	0.2	120.87	4.0000	0.000
	11.00	20.2	0.4	120.91	3.7273	0.000
	12.00	20.3	0.6	120.94	3.5000	0.000
	13.00	20.6	0.8	120.98	3.3077	0.000
	14.00	20.7	0.9	121.01	3.1429	0.000
	15.00	20.8	1.1	121.05	3.0000	0.000
	16.00	21.0	1.2	121.09	2.8750	0.000
	17.00	21.0	1.3	121.13	2.7647	0.000
	18.00	21.2	1.5	121.15	2.6667	0.000

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING
 TEST: 9252 DST#1 OHL SOUTHWEST#1-4 LANDMARK/VESS
 DATE: 05/22/96 TIME: 12:40:33

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	19.00	21.4	1.6	121.20	2.5789	0.000
	20.00	21.5	1.8	121.23	2.5000	0.000
	21.00	21.7	2.0	121.27	2.4286	0.000
	22.00	21.9	2.1	121.31	2.3636	0.000
	23.00	22.0	2.3	121.34	2.3043	0.000
	24.00	22.2	2.5	121.41	2.2500	0.000
	25.00	22.3	2.6	121.42	2.2000	0.000
	26.00	22.5	2.7	121.45	2.1538	0.001
	27.00	22.6	2.9	121.49	2.1111	0.001
	28.00	22.8	3.1	121.53	2.0714	0.001
***** End Shut-in 1	29.00	23.0	3.3	121.59	2.0345	0.001
***** Start Flow 2	0.00	19.7	0.0	121.62		
	1.00	19.8	0.1	121.66		
	2.00	19.8	0.1	121.71		
	3.00	19.9	0.1	121.74		
	4.00	19.8	0.1	121.78		
	5.00	19.8	0.0	121.81		
	6.00	19.8	0.0	121.84		
	7.00	19.7	-0.0	121.89		
	8.00	19.8	0.1	121.92		
	9.00	19.9	0.1	121.97		
	10.00	19.8	0.1	121.99		
	11.00	19.9	0.1	122.02		
	12.00	19.8	0.1	122.05		
	13.00	19.8	0.0	122.10		
	14.00	19.8	0.1	122.14		
	15.00	19.9	0.2	122.18		
	16.00	19.9	0.1	122.22		
	17.00	19.9	0.1	122.24		
	18.00	19.9	0.1	122.27		
	19.00	19.9	0.1	122.29		
	20.00	19.9	0.1	122.33		
	21.00	19.9	0.1	122.36		
	22.00	19.9	0.2	122.40		
	23.00	19.9	0.1	122.43		
	24.00	19.9	0.1	122.47		
	25.00	19.9	0.1	122.52		
	26.00	19.9	0.2	122.53		
	27.00	20.0	0.3	122.56		
	28.00	20.0	0.2	122.60		
***** End Flow 2	29.00	20.0	0.2	122.63		
***** Start Shutin 2	0.00	20.0	0.0	122.63	0.0000	0.000
	1.00	18.5	-1.5	122.68	60.0000	0.000
	2.00	18.5	-1.5	122.71	30.5000	0.000
	3.00	18.6	-1.4	122.74	20.6667	0.000
	4.00	18.7	-1.3	122.76	15.7500	0.000
	5.00	18.8	-1.2	122.80	12.8000	0.000
	6.00	19.0	-1.0	122.83	10.8333	0.000
	7.00	19.1	-0.9	122.87	9.4286	0.000
	8.00	19.1	-0.8	122.90	8.3750	0.000
	9.00	19.4	-0.6	122.93	7.5556	0.000

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9252 DST#1 OHL SOUTHWEST#1-4 LANDMARK/VESS

DATE: 05/22/96 TIME: 12:40:33

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	10.00	19.4	-0.5	122.97	6.9000	0.000
	11.00	19.5	-0.4	122.99	6.3636	0.000
	12.00	19.6	-0.3	123.02	5.9167	0.000
	13.00	19.8	-0.2	123.05	5.5385	0.000
	14.00	19.9	-0.0	123.09	5.2143	0.000
	15.00	20.0	0.0	123.13	4.9333	0.000
	16.00	20.2	0.2	123.15	4.6875	0.000
	17.00	20.3	0.3	123.18	4.4706	0.000
	18.00	20.4	0.4	123.22	4.2778	0.000
	19.00	20.6	0.6	123.25	4.1053	0.000
	20.00	20.8	0.8	123.29	3.9500	0.000
	21.00	20.9	0.9	123.31	3.8095	0.000
	22.00	20.9	1	123.35	3.6818	0.000
	23.00	21.1	1.2	123.37	3.5652	0.000
	24.00	21.2	1.2	123.40	3.4583	0.000
	25.00	21.4	1.4	123.43	3.3600	0.000
	26.00	21.6	1.6	123.46	3.2692	0.000
	27.00	21.7	1.7	123.48	3.1852	0.000
	28.00	21.9	1.9	123.52	3.1071	0.000
	29.00	22.0	2.0	123.55	3.0345	0.000
	30.00	22.2	2.2	123.58	2.9667	0.000
***** End Shut-in 2	31.00	22.3	2.3	123.61	2.9032	0.000
***** Final Hydro.	230.00	2034.7	0.0	123.74		

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: OHL Southwest #1-4

LOCATION : 4-10S-32W, Thomas Cty KS

TICKET No. 9252 D.S.T. No. 1 DATE 5-22-96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 42

TOTAL TOOL 62

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 62

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands69 Single 1 Total 4325

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4387

TOTAL DEPTH 4370

TOTAL DRILL PIPE ABOVE K.B. 17

REMARKS:

P.O. SUB 1' ABOVE 120' DP	4188
C.O. SUB 1'	4308
S.I. TOOL 5'	4314
HMV 5'	4319
JARS N/A	
SAFETY JOINT N/A	
PACKER	4323
PACKER	4328
DEPTH	
STUBB 1'	4329
ANCHOR	
PERF	
ALP RECORDER	4342
PERF	4365
T.C.	
DEPTH	
AK-1 RECORDER	4365
BULLNOSE 5'	
T.D.	4370

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

Nº 9252

Well Name & No.	DHL Southwest #1-4		Test No.	1	Date	5-22-96
Company	Landmark Energy Expl./Vess Oil		Zone Tested	Lans/KC 'L'		
Address	1861 N. Rock Road Ste #205 Wichita, KS. 67206		Elevation	3096	KB	3091 GL
Co. Rep / Geo.	Craig Lawik	Cont.	L.D. Davis #1	Est. Ft. of Pay	Por. %	
Location: Sec.	4	Twp.	10 S	Rge.	32 W	Co. Thomas State KS
No. of Copies	Distribution Sheet (Y, N)		Turnkey (Y, N)		Evaluation (Y, N)	

Interval Tested	4328 - 4370	Initial Str Wt./Lbs.	46,000	Unseated Str Wt./Lbs.	46,000
Anchor Length	42'	Wt. Set Lbs.	30,000	Wt. Pulled Loose/Lbs.	70,000
Top Packer Depth	4323	Hole Size — 7 7/8"	Rubber Size — 6 3/4"		
Bottom Packer Depth	4328	Wt. Pipe I.D. — 2.7 Ft. Run	—		
Total Depth	4370	Drill Collar — 2.25 Ft. Run	—		
Mud Wt. 9.2 LCM	Vis. 42 WL 8.0	Drill Pipe Size	4 1/2" XH	Ft. Run	4325'
Blow Description IF: Weak surface blow died in 15 mins.					

FF: No blow.

Recovery — Total Feet	1'	Ft. in DC	—	Ft. in WP	—	Ft. in DP	1'
Rec.	Feet Of	%gas	%oil	%water	%mud		
Rec.	Feet Of	%gas	%oil	%water	%mud		
Rec.	1' Feet Of	Drilg. Mud		%gas	%oil	%water	%mud
Rec.	Feet Of	w/oil stains		%gas	%oil	%water	%mud
Rec.	Feet Of	in tool		%gas	%oil	%water	%mud
BHT	124°	°F Gravity	°API D@	°F Corrected Gravity	°API		
RW	@	°F Chlorides	ppm Recovery	Chlorides	1,200	ppm System	
(A) Initial Hydrostatic Mud	2083	2123	PSI	Recorder No.	2341	T-Started	1240
(B) First Initial Flow Pressure	19	20	PSI	@ (depth)	4342	T-Open	0228
(C) First Final Flow Pressure	19	20	PSI	Recorder No.	13339	T-Pulled	0428
(D) Initial Shut-in Pressure	22	20	PSI	@ (depth)	4365	T-Out	0600
(E) Second Initial Flow Pressure	19	20	PSI	Recorder No.	—		
(F) Second Final Flow Pressure	19	20	PSI	@ (depth)	—		
(G) Final Shut-in Pressure	22	20	PSI	Initial Opening	30	Test	600
(H) Final Hydrostatic Mud	2034	2103	PSI	Initial Shut-in	30	Jars	

Alp Elec. AK-1

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

Craig Lawik
Rod Steinbrink

Final Flow 30
Final Shut-in 30
Safety Joint
Straddle
Circ. Sub X N/C
Sampler
Extra Packer
Elect. Rec. X 150
Other
TOTAL PRICE \$ 750

5

D

TRILOBITE TESTING L.L.C.

OPERATOR : Landmark Exp/Vess Oil
WELL NAME: OHL Southwest #1-4
LOCATION : 04-10S-32W, Thomas Cty KS
INTERVAL : 4480.00 To 4527.00 ft

DATE 5-23-96
KB 3096.00 ft
GR 3091.00 ft
TD 4527.00 ft

TICKET NO: 9253
FORMATION: Pawnee
TEST TYPE: CONVENTIONAL

DST #2

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	AK-1	AK-1	Alpine			PF Fr. 1138 to 1208 hr
SI 45 Range(Psi)	4025.0	4025.0	4995.0	0.0	0.0	IS Fr. 1208 to 1253 hr
SF 45 Clock(hrs)	12	12	Elect			SF Fr. 1253 to 1338 hr
FS 60 Depth(ft)	4522.0	4522.0	4484.0	0.0	0.0	FS Fr. 1338 to 1438 hr

	Field	1	2	3	4	
A. Init Hydro	2223.0	2241.0	2284.0	0.0	0.0	T STARTED 1013 hr
B. First Flow	83.0	100.0	26.0	0.0	0.0	T ON BOTM 1133 hr
Bl. Final Flow	83.0	100.0	68.0	0.0	0.0	T OPEN 1138 hr
C. In Shut-in	1090.0	1082.0	1062.0	0.0	0.0	T PULLED 1438 hr
D. Init Flow	135.0	140.0	72.0	0.0	0.0	T OUT 1630 hr
E. Final Flow	155.0	158.0	121.0	0.0	0.0	
F. Fl Shut-in	1030.0	1036.0	1017.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2203.0	2219.0	2156.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 30000.00 lbs
						Wt Pulled Loose 66000.00 lbs
						Initial Str Wt 46000.00 lbs
						Unseated Str Wt 46000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 0.00 ft
						D.P. Length 4481.00 ft

RECOVERY

Tot Fluid 210.00 ft of 0.00 ft in DC and 210.00 ft in DP
1.00 ft of Free oil - 100% oil
89.00 ft of Muddy water - 60% water, 40% mud
120.00 ft of Mud cut salt water - 95% water, 5% mud

RW .10 @ 80 F

SALINITY 65000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow -
Tool slid 3' picked up 1" surge, blow
slowly built to 5"

Initial Shutin -
Intermittent surface blow for 5 min

Final Flow -
Surface return in 4 min, built to 1"

Final Shutin -
No return blow

SAMPLES:
SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.30 lb/c
Vis.	51.00 S/L
W.L.	11.20 in3
F.C.	0.00 in
Mud Drop N	

Amt. of fill	0.00 ft
Btm. H. Temp.	139.00 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 Y 3.00 ft
Tester ROD STEINBRINK
Co. Rep. CRAIG CAULK
Contr. L.D.DAVIS
Rig # 1
Unit #
Pump T.

Test Successful: Y

9253 DST #2 OHL SOUTHWEST #1-4 LANDMARK/UESS

TEST HISTORY

Flag Points

t (Min.)	P (PSig)
A: 0.00	2284.01
B: 0.00	25.78
C: 29.00	68.01
D: 45.00	1062.32
E: 0.00	71.67
F: 45.00	121.00
G: 60.00	1016.64
Q: 0.00	2155.52

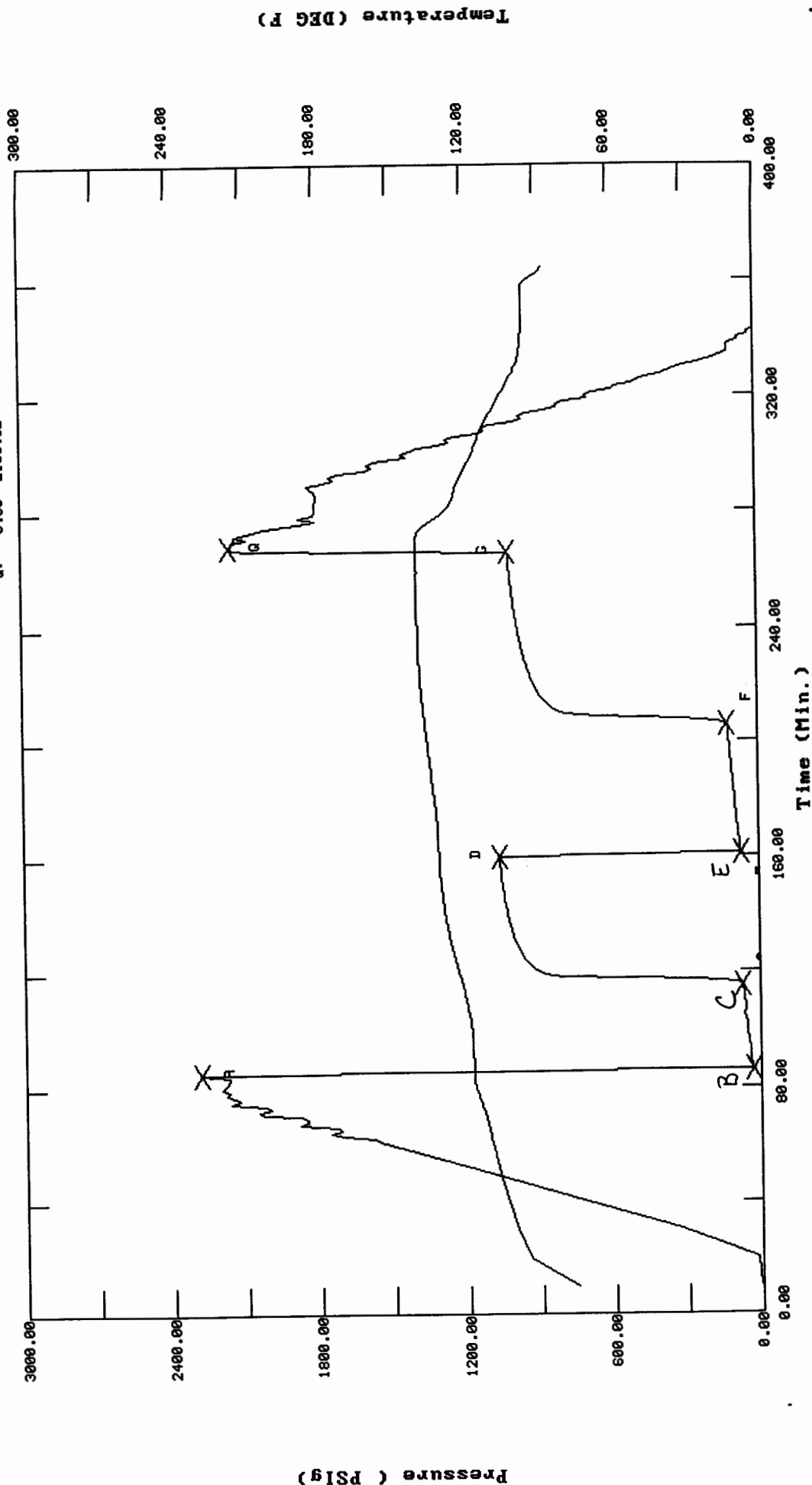
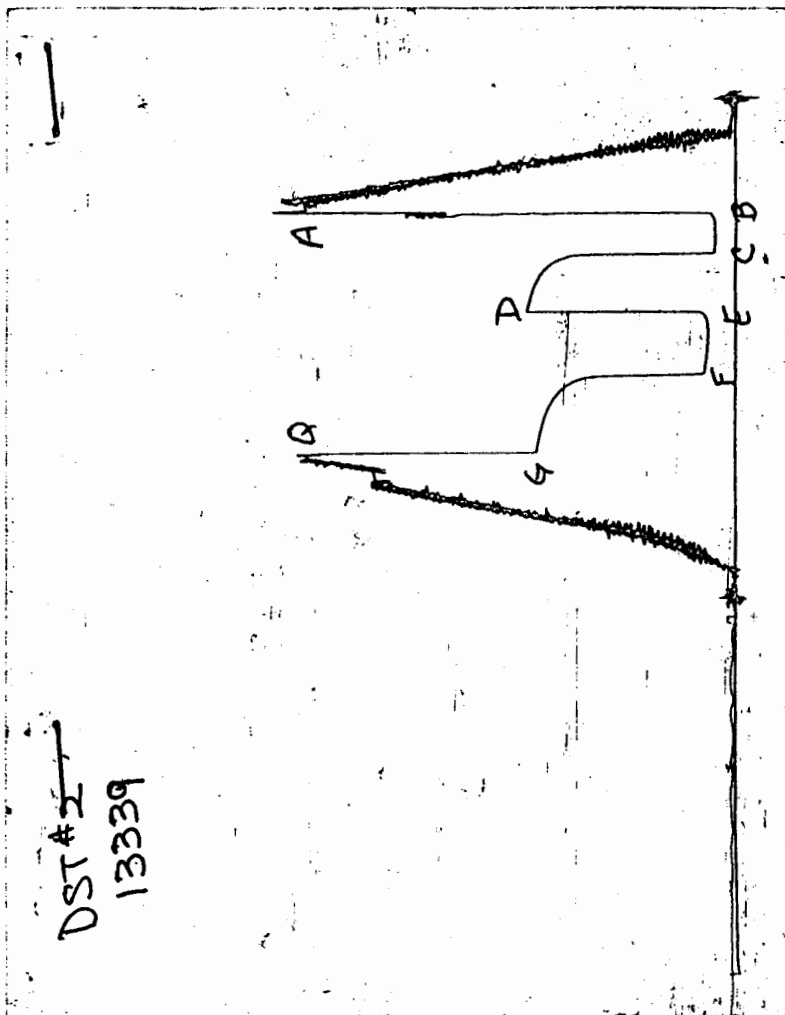


CHART PAGE



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

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING
 TEST: 9253 DST #2 OHL SOUTHWEST #1-4 LANDMARK/VESS
 DATE: 05/23/96 TIME: 10:13:34

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	85.00	2284.0	0.0	117.73		
***** Start Flow 1	0.00	25.8	0.0	117.74		
	1.00	36.6	10.9	117.82		
	2.00	34.6	8.9	117.81		
	3.00	38.4	12.6	117.81		
	4.00	37.3	11.5	117.81		
	5.00	41.4	15.6	117.83		
	6.00	39.9	14.1	117.84		
	7.00	41.5	15.8	117.86		
	8.00	42.0	16.3	117.91		
	9.00	43.1	17.4	117.95		
	10.00	45.3	19.5	118.00		
	11.00	47.1	21.3	118.07		
	12.00	48.7	22.9	118.16		
	13.00	49.3	23.5	118.26		
	14.00	50.6	24.8	118.38		
	15.00	52.1	26.3	118.51		
	16.00	53.5	27.7	118.66		
	17.00	54.7	29.0	118.82		
	18.00	56.0	30.2	119.01		
	19.00	61.5	35.7	119.21		
	20.00	57.0	31.2	119.41		
	21.00	58.1	32.3	119.64		
	22.00	59.3	33.5	119.87		
	23.00	60.5	34.7	120.11		
	24.00	61.8	36.0	120.39		
	25.00	63.0	37.2	120.58		
	26.00	64.1	38.3	120.86		
	27.00	65.5	39.7	121.13		
	28.00	66.8	41.1	121.41		
***** End Flow 1	29.00	68.0	42.2	121.68		
***** Start Shutin 1	0.00	68.0	0.0	121.68	0.0000	0.005
	1.00	86.0	18.0	121.96	30.0000	0.007
	2.00	251.3	183.3	122.23	15.5000	0.063
	3.00	810.1	742.1	122.59	10.6667	0.656
	4.00	876.6	808.6	122.94	8.2500	0.768
	5.00	903.3	835.3	123.27	6.8000	0.816
	6.00	921.9	853.8	123.59	5.8333	0.850
	7.00	936.2	868.2	123.94	5.1429	0.876
	8.00	947.8	879.8	124.27	4.6250	0.898
	9.00	957.5	889.4	124.58	4.2222	0.917
	10.00	965.8	897.8	124.90	3.9000	0.933
	11.00	973.1	905.1	125.21	3.6364	0.947
	12.00	979.6	911.6	125.50	3.4167	0.960
	13.00	985.4	917.4	125.78	3.2308	0.971
	14.00	990.7	922.7	126.06	3.0714	0.981
	15.00	995.6	927.6	126.32	2.9333	0.991
	16.00	1000.1	932.1	126.64	2.8125	1.000
	17.00	1004.2	936.2	126.88	2.7059	1.008
	18.00	1008.1	940.1	127.12	2.6111	1.016
	19.00	1011.7	943.7	127.36	2.5263	1.023

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING
TEST: 9253 DST #2 OHL SOUTHWEST #1-4 LANDMARK/VESS
DATE: 05/23/96 TIME: 10:13:34

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	20.00	1015.0	947.0	127.59	2.4500	1.030
	21.00	1018.2	950.2	127.75	2.3810	1.037
	22.00	1021.1	953.1	127.99	2.3182	1.043
	23.00	1023.9	955.9	128.20	2.2609	1.048
	24.00	1026.7	958.7	128.39	2.2083	1.054
	25.00	1029.2	961.2	128.57	2.1600	1.059
	26.00	1031.6	963.6	128.75	2.1154	1.064
	27.00	1033.9	965.9	128.92	2.0741	1.069
	28.00	1036.1	968.1	129.07	2.0357	1.073
	29.00	1038.1	970.1	129.23	2.0000	1.078
	30.00	1040.2	972.2	129.38	1.9667	1.082
	31.00	1042.0	974.0	129.50	1.9355	1.086
	32.00	1043.9	975.9	129.65	1.9062	1.090
	33.00	1045.7	977.7	129.78	1.8788	1.094
	34.00	1047.4	979.4	129.90	1.8529	1.097
	35.00	1049.0	981.0	130.03	1.8286	1.100
	36.00	1050.5	982.5	130.14	1.8056	1.104
	37.00	1052.1	984.1	130.25	1.7838	1.107
	38.00	1053.5	985.5	130.37	1.7632	1.110
	39.00	1054.9	986.9	130.46	1.7436	1.113
	40.00	1056.2	988.2	130.56	1.7250	1.116
	41.00	1057.6	989.5	130.65	1.7073	1.118
	42.00	1058.8	990.8	130.74	1.6905	1.121
	43.00	1060.0	992.0	130.82	1.6744	1.124
	44.00	1061.3	993.3	130.91	1.6591	1.126
***** End Shut-in 1	45.00	1062.3	994.3	130.99	1.6444	1.129
***** Start Flow 2	0.00	71.7	0.0	131.01		
	1.00	72.8	1.1	131.03		
	2.00	74.1	2.5	131.05		
	3.00	75.3	3.7	131.06		
	4.00	76.5	4.9	131.08		
	5.00	77.8	6.1	131.11		
	6.00	79.3	7.7	131.15		
	7.00	80.6	9.0	131.18		
	8.00	81.9	10.2	131.25		
	9.00	83.0	11.3	131.31		
	10.00	84.2	12.5	131.37		
	11.00	85.3	13.6	131.45		
	12.00	86.4	14.8	131.55		
	13.00	87.6	15.9	131.67		
	14.00	88.7	17.0	131.78		
	15.00	89.7	18.1	131.89		
	16.00	90.9	19.2	132.02		
	17.00	92.0	20.3	132.16		
	18.00	93.2	21.6	132.29		
	19.00	94.5	22.8	132.43		
	20.00	95.6	23.9	132.56		
	21.00	96.6	24.9	132.70		
	22.00	97.6	26.0	132.85		
	23.00	98.7	27.1	132.99		
	24.00	99.8	28.1	133.15		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9253 DST #2 OHL SOUTHWEST #1-4 LANDMARK/VESS

DATE: 05/23/96

TIME: 10:13:34

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	25.00	100.7	29.1	133.30		
	26.00	101.7	30.1	133.44		
	27.00	102.7	31.0	133.58		
	28.00	103.8	32.1	133.73		
	29.00	104.8	33.1	133.88		
	30.00	105.8	34.1	134.02		
	31.00	106.9	35.2	134.17		
	32.00	108.1	36.4	134.30		
	33.00	109.2	37.5	134.44		
	34.00	110.2	38.6	134.59		
	35.00	111.2	39.5	134.73		
	36.00	112.1	40.5	134.87		
	37.00	113.1	41.5	134.97		
	38.00	114.1	42.4	135.10		
	39.00	115.1	43.4	135.23		
	40.00	116.1	44.5	135.36		
	41.00	117.0	45.3	135.48		
	42.00	118.0	46.3	135.60		
	43.00	119.0	47.3	135.71		
	44.00	120.0	48.3	135.84		
***** End Flow 2	45.00	121.0	49.3	135.95		
***** Start Shutin 2	0.00	121.0	0.0	135.95	0.0000	0.015
	1.00	158.2	37.2	136.07	75.0000	0.025
	2.00	308.6	187.6	136.19	38.0000	0.095
	3.00	650.4	529.4	136.31	25.6667	0.423
	4.00	787.1	666.1	136.49	19.5000	0.620
	5.00	818.3	697.3	136.62	15.8000	0.670
	6.00	837.8	716.8	136.78	13.3333	0.702
	7.00	852.7	731.7	136.90	11.5714	0.727
	8.00	864.9	743.9	137.03	10.2500	0.748
	9.00	875.2	754.2	137.16	9.2222	0.766
	10.00	884.1	763.1	137.27	8.4000	0.782
	11.00	892.1	771.1	137.37	7.7273	0.796
	12.00	899.2	778.2	137.49	7.1667	0.809
	13.00	905.7	784.7	137.58	6.6923	0.820
	14.00	911.7	790.7	137.68	6.2857	0.831
	15.00	917.1	796.1	137.76	5.9333	0.841
	16.00	922.2	801.2	137.86	5.6250	0.850
	17.00	926.9	805.9	137.93	5.3529	0.859
	18.00	931.4	810.4	138.02	5.1111	0.868
	19.00	935.7	814.7	138.10	4.8947	0.875
	20.00	939.5	818.5	138.17	4.7000	0.883
	21.00	943.3	822.2	138.24	4.5238	0.890
	22.00	946.8	825.8	138.30	4.3636	0.896
	23.00	950.1	829.1	138.36	4.2174	0.903
	24.00	953.4	832.4	138.42	4.0833	0.909
	25.00	956.5	835.5	138.47	3.9600	0.915
	26.00	959.5	838.4	138.51	3.8462	0.921
	27.00	962.1	841.1	138.56	3.7407	0.926
	28.00	964.8	843.8	138.60	3.6429	0.931
	29.00	967.4	846.4	138.62	3.5517	0.936

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING
 TEST: 9253 DST #2 OHL SOUTHWEST #1-4 LANDMARK/VESS
 DATE: 05/23/96 TIME: 10:13:34

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	30.00	969.9	848.9	138.68	3.4667	0.941
	31.00	972.3	851.3	138.71	3.3871	0.945
	32.00	974.6	853.6	138.74	3.3125	0.950
	33.00	976.8	855.8	138.76	3.2424	0.954
	34.00	978.9	857.9	138.81	3.1765	0.958
	35.00	981.0	860.0	138.83	3.1143	0.962
	36.00	983.0	862.0	138.86	3.0556	0.966
	37.00	985.0	864.0	138.88	3.0000	0.970
	38.00	986.8	865.8	138.90	2.9474	0.974
	39.00	988.4	867.4	138.92	2.8974	0.977
	40.00	990.3	869.3	138.93	2.8500	0.981
	41.00	992.1	871.1	138.95	2.8049	0.984
	42.00	993.7	872.7	138.97	2.7619	0.987
	43.00	995.3	874.3	138.98	2.7209	0.991
	44.00	996.8	875.8	139.01	2.6818	0.994
	45.00	998.3	877.3	139.00	2.6444	0.997
	46.00	999.8	878.8	139.02	2.6087	1.00
	47.00	1001.2	880.2	139.04	2.5745	1.002
	48.00	1002.6	881.6	139.04	2.5417	1.005
	49.00	1004.0	883.0	139.03	2.5102	1.008
	50.00	1005.3	884.3	139.05	2.4800	1.011
	51.00	1006.5	885.5	139.07	2.4510	1.013
	52.00	1007.8	886.8	139.07	2.4231	1.016
	53.00	1009.0	888.0	138.82	2.3962	1.018
	54.00	1010.2	889.2	139.06	2.3704	1.021
	55.00	1011.3	890.3	139.05	2.3455	1.023
	56.00	1012.4	891.4	139.05	2.3214	1.025
	57.00	1013.5	892.4	139.05	2.2982	1.027
	58.00	1014.6	893.6	139.05	2.2759	1.029
	59.00	1015.7	894.7	139.03	2.2542	1.032
***** End Shut-in 2	60.00	1016.6	895.6	139.03	2.2333	1.034
***** Final Hydro.	268.00	2155.5	0.0	139.09		

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: OHL Southwest #1-4

LOCATION : 04-10S-32W, Thomas Cty KS

TICKET No. 9253 D.S.T. No. 2 DATE 5-23-96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

TOTAL 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 1 Total 31

TOTAL ASSEMBLY 67

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands 72 Single 1 Total 4481

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4548

TOTAL DEPTH 4527

TOTAL DRILL PIPE ABOVE K.B. 21

REMARKS:

P.O. SUB 1' ABOVE 120' DP	4340
C.O. SUB 1'	4460
S.I. TOOL 5'	4466
HMV 5'	4471
JARS N/A	
SAFETY JOINT N/A	
PACKER 5'	4475
PACKER 5'	4480
DEPTH	
STUBB 1'	4481
ANCHOR	
3' PERF	4484
ALPINE RECORDER	4484
5' PERF	4489
1' CO SUB	4490
31' PIPE	4521
T.C.	
DEPTH	
1' CO SUB	4522
AK-1 RECORDER	4522
BULLNOSE 5'	
T.D.	4527

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

Nº 9253

Well Name & No.	<u>OHL Southwest #1-4</u>		Test No.	<u>2</u>	Date	<u>5-23-96</u>	
Company	<u>Landmark Energy Expl. / Vess Oil Corp.</u>		Zone Tested	<u>Pawnee</u>			
Address	<u>1861 N. Rock Road Ste #205 Wichita, KS. 67206</u>		Elevation	<u>3096</u>	KB	<u>3091</u>	GL
Co. Rep / Geo.	<u>Craig Caulk</u>	Cont.	<u>L.D. Davis</u>	Est. Ft. of Pay	<u>Por. %</u>		
Location: Sec.	<u>4</u>	Twp.	<u>10^S</u>	Rge.	<u>32^W</u>	Co.	<u>Thomas</u> State <u>KS.</u>
No. of Copies	<u>Distribution Sheet (Y, N) <u>N</u></u>		Turnkey (Y, N)	<u>Evaluation (Y, N)</u>			

Interval Tested	<u>4480 - 4527</u>	Initial Str Wt./Lbs.	<u>46,000</u>	Unseated Str Wt./Lbs.	<u>46,000</u>
Anchor Length	<u>47'</u>	Wt. Set Lbs.	<u>30,000</u>	Wt. Pulled Loose/Lbs.	<u>66,000</u>
Top Packer Depth	<u>4475</u>	Hole Size — 7 7/8"	<u>Rubber Size — 6 3/4"</u>		
Bottom Packer Depth	<u>4480</u>	Wt. Pipe I.D. — 2.7 Ft. Run	<u>—</u>		
Total Depth	<u>4527</u>	Drill Collar — 2.25 Ft. Run	<u>—</u>		
Mud Wt. <u>9.3</u> LCM <u>—</u> Vis. <u>51</u> WL <u>11.2</u>	Drill Pipe Size <u>4 1/2" XH</u>		Ft. Run <u>—</u>		

Blow Description IF: Tool slid 3' picked up 1" surge, blow slowly built to 5"
ISI: Intermittent surface blow for 5 mins.
FF: Surface return in 4 mins. built to 1".
FSI: No return blow.

Recovery — Total Feet	<u>210'</u>	Ft. in DC	<u>—</u>	Ft. in WP	<u>—</u>	Ft. in DP	<u>210'</u>
Rec. <u>1'</u>	Feet Of	<u>FO</u>	%gas	<u>100</u>	%oil	%water	%mud
Rec. <u>89'</u>	Feet Of	<u>MW</u>	%gas	%oil	<u>60</u>	%water	<u>40</u> %mud
Rec. <u>120'</u>	Feet Of	<u>SW</u>	%gas	%oil	<u>95</u>	%water	<u>5</u> %mud
Rec. <u>—</u>	Feet Of	<u>—</u>	%gas	%oil	%water	%mud	
Rec. <u>—</u>	Feet Of	<u>—</u>	%gas	%oil	%water	%mud	

BHT 139° °F Gravity — °API D@ — °F Corrected Gravity — °API
RW .10 @ 80° °F Chlorides 65,000 ppm Recovery Chlorides 2,000 ppm System

(A) Initial Hydrostatic Mud	<u>2284</u>	<u>2223</u> PSI	Recorder No.	<u>2341</u>	T-Started	<u>1013</u>
(B) First Initial Flow Pressure	<u>25</u>	<u>83</u> PSI	@ (depth)	<u>4484</u>	T-Open	<u>1138</u>
(C) First Final Flow Pressure	<u>68</u>	<u>83</u> PSI	Recorder No.	<u>13339</u>	T-Pulled	<u>1438</u>
(D) Initial Shut-in Pressure	<u>1062</u>	<u>1090</u> PSI	@ (depth)	<u>4522</u>	T-Out	<u>1630</u>
(E) Second Initial Flow Pressure	<u>71</u>	<u>135</u> PSI	Recorder No.	<u>—</u>		
(F) Second Final Flow Pressure	<u>121</u>	<u>155</u> PSI	@ (depth)	<u>—</u>		
(G) Final Shut-in Pressure	<u>1016</u>	<u>1030</u> PSI	Initial Opening	<u>30</u>	Test	<u>600</u>
(H) Final Hydrostatic Mud	<u>2155</u>	<u>2203</u> PSI	Initial Shut-in	<u>45</u>	Jars	<u>—</u>

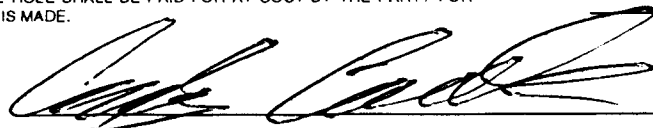
Alp. Elec.

AK-1

Final Flow 45 Safety Joint —
Final Shut-in 60 Straddle —

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

Rod Steinbrink

Circ. Sub X N/C
Sampler —
Extra Packer —
Elect. Rec. X 150
Other —
TOTAL PRICE \$ 750

5

D

TRILOBITE TESTING L.L.C.

OPERATOR : Landmark Exp/Vess Oil

DATE 5-24-96

WELL NAME: OHL Southwest #1-4

KB 3096.00 ft

TICKET NO: 9401

DST #3

LOCATION : 04-10S-32W, Thomas Cty KS

GR 3091.00 ft

FORMATION: Myrick, Ft Scott, John

INTERVAL : 4534.00 To 4646.00 ft

TD 4646.00 ft

TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF	0	Rec.	AK-1	Alpine			PF Fr. to hr
SI	0	Range(Psi)	4700.0	4995.0	0.0	0.0	IS Fr. to hr
SF	0	Clock(hrs)	12	Elect			SF Fr. to hr
FS	0	Depth(ft)	4540.0	4570.0	0.0	0.0	FS Fr. to hr

	Field	1	2	3	4	
A. Init Hydro	0.0	0.0	0.0	0.0	0.0	T STARTED 0855 hr
B. First Flow	0.0	0.0	0.0	0.0	0.0	T ON BOTM 1009 hr
B1. Final Flow	0.0	0.0	0.0	0.0	0.0	T OPEN 1011 hr
C. In Shut-in	0.0	0.0	0.0	0.0	0.0	T PULLED 1041 hr
D. Init Flow	0.0	0.0	0.0	0.0	0.0	T OUT 1145 hr
E. Final Flow	0.0	0.0	0.0	0.0	0.0	
F. Fl Shut-in	0.0	0.0	0.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	0.0	0.0	0.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	O	I				Wt Set On Packer 48000.00 lbs
						Wt Pulled Loose 48000.00 lbs
						Initial Str Wt 48000.00 lbs
						Unseated Str Wt 48000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 0.00 ft
						D.P. Length 4544.00 ft

RECOVERY

Tot Fluid 0.00 ft of 0.00 ft in DC and 0.00 ft in DP

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

BLOW DESCRIPTION

* Misrun- hydraulic tool would not open

SAMPLES:

SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.40 lb/c
Vis.	49.00 S/L
W.L.	11.20 in3
F.C.	0.00 in
Mud Drop N	

Amt. of fill	0.00 ft
Btm. H. Temp.	0.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	none
Reversed Out N	
Tool Chased N	
Tester	Paul Simpson
Co. Rep.	Craig Caulk
Contr.	L.D. Drilling
Rig #	1
Unit #	
Pump T.	

Test Successful: N

TEST HISTORY

9401 Landmark/Vess OHL SW #1-4 DST #3

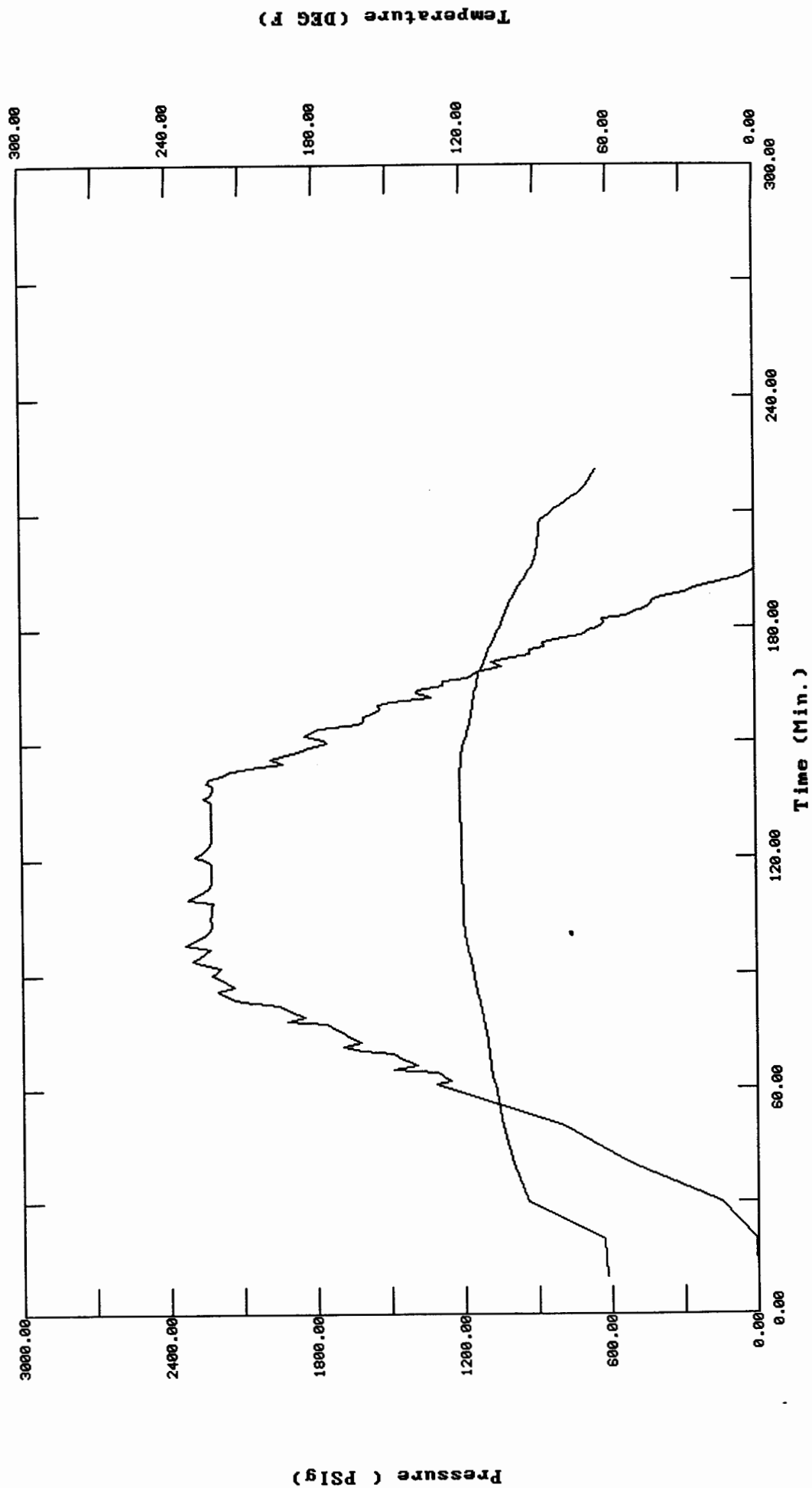
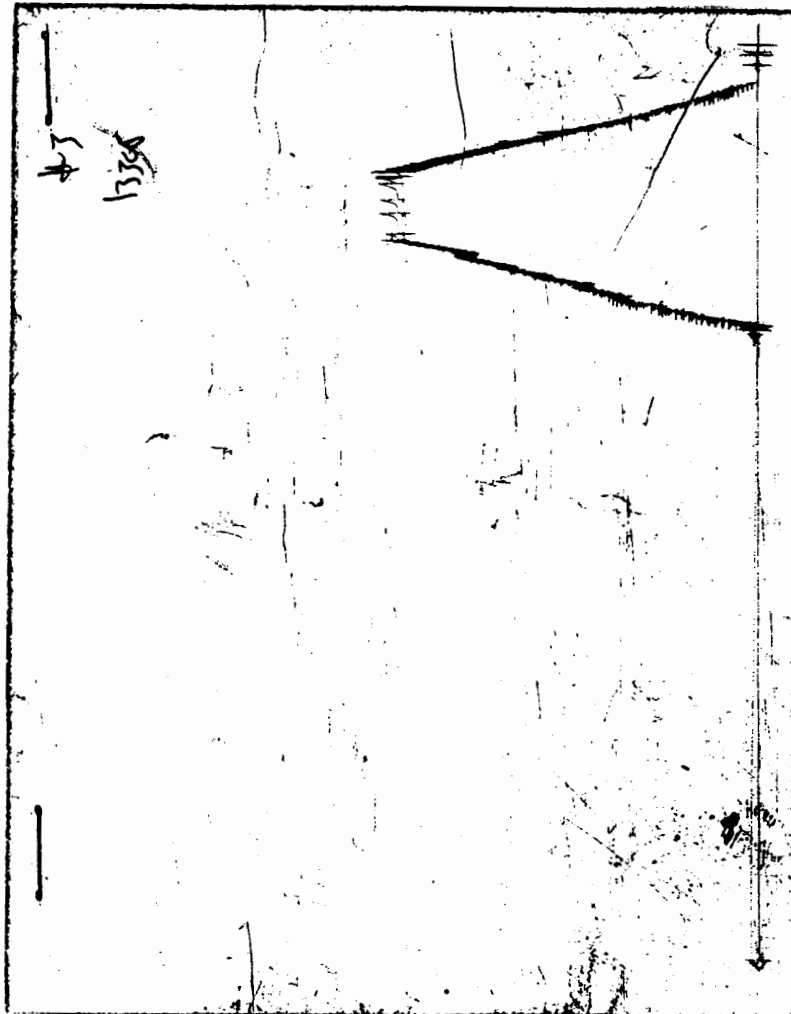


CHART PAGE



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

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: OHL Southwest #1-4

LOCATION : 04-10S-32W, Thomas Cty KS

TICKET No. 9401 D.S.T. No. 3 DATE 5-24-96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 20

TOTAL TOOL 40

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands 1 Single 1 Total 92

TOTAL ASSEMBLY 132

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands65 Single 1 Total 4544

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4676

TOTAL DEPTH 4646

TOTAL DRILL PIPE ABOVE K.B. 30

REMARKS:

P.O. SUB	
C.O. SUB top of tool	4514
S.I. TOOL H&T	4520
HMV Sterling	4525
JARS n/a	
SAFETY JOINT n/a	
PACKER Top Packer	4529
PACKER Bottom Packer	4534
DEPTH 4534	
STUBB 4535	
ANCHOR	
5' perf	4540
Ak-1 recorder	4540
1 Joint pipe	4570
Alpine recorder	4570
1 stand & subs	4633
T.C.	
DEPTH	
5' perf	4638
5'perf	4643
3' bull plug	
BULLNOSE	to
T.D.	4646

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 9401

Well Name & No. <u>OHZ SW 1-4</u>	Test No. <u>83</u>	Date <u>5-24-96</u>
Company <u>Landmark / Oess</u>	Zone Tested <u>Myric Shale Fort Scott Johna</u>	
Address _____	Elevation <u>3096</u> KB <u>3091</u> GL	
Co. Rep / Geo. <u>Craig Cault</u>	Cont. <u>L.D.</u>	Est. Ft. of Pay _____ Por. _____ %
Location: Sec. <u>4</u> Twp. <u>10s</u>	Rge. <u>32w</u>	Co. <u>Thomas</u> State <u>Ks</u>
No. of Copies _____	Distribution Sheet (Y, N) _____	Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested <u>4534-4646</u>	Initial Str Wt./Lbs. _____	Unseated Str Wt./Lbs. _____
Anchor Length <u>112</u>	Wt. Set Lbs. _____	Wt. Pulled Loose/Lbs. _____
Top Packer Depth <u>4529</u>	Tool Weight _____	
Bottom Packer Depth <u>4534</u>	Hole Size — 7 7/8" _____	Rubber Size — 6 3/4" _____
Total Depth <u>4646</u>	Wt. Pipe Run _____	Drill Collar Run _____
Mud Wt. <u>9.4</u> LCM _____ Vis. <u>49</u> WL <u>11.2</u>	Drill Pipe Size <u>4 1/2 x H</u>	Ft. Run _____
Blow Description <u>hydraulic tool would not open</u>		
<u>Mission</u>		

Recovery — Total Feet _____	GIP _____	Ft. in DC _____	Ft. in DP _____
Rec. _____ Feet Of _____	%gas _____	%oil _____	%water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____	%oil _____	%water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____	%oil _____	%water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____	%oil _____	%water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____	%oil _____	%water _____ %mud _____
BHT _____ °F Gravity _____	°API D@ _____	°F Corrected Gravity _____	°API _____
RW _____ @ _____	°F Chlorides _____	ppm Recovery _____	Chlorides _____ ppm System _____
(A) Initial Hydrostatic Mud _____	PSI Recorder No. <u>3027</u>	T-Started <u>0855</u>	
(B) First Initial Flow Pressure _____	PSI (depth) <u>4570</u>	T-Open <u>1011</u>	
(C) First Final Flow Pressure _____	PSI Recorder No. <u>13308</u>	T-Pulled <u>1041</u>	
(D) Initial Shut-in Pressure _____	PSI (depth) <u>4540</u>	T-Out <u>1145</u>	
(E) Second Initial Flow Pressure _____	PSI Recorder No. _____		
(F) Second Final Flow Pressure _____	PSI (depth) _____		
(G) Final Shut-in Pressure _____	PSI Initial Opening _____	Test _____	
(H) Final Hydrostatic Mud _____	PSI Initial Shut-in _____	Jars _____	

Final Flow _____	Safety Joint _____
Final Shut-in _____	Straddle _____
	Circ. Sub _____
	Sampler _____
	Extra Packer _____

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 Paul Simpson

Elect. Rec. _____
Other - 3 hrs rig time @ 155.00
TOTAL PRICE \$ 465.00

TRILOBITE TESTING L.L.C.

OPERATOR : Landmark Exp/Vess Oil

DATE 5-24-96

WELL NAME: OHL Southwest #1-4

KB 3096.00 ft

TICKET NO: 9402

DST #4

LOCATION : 04-10S-32W, Thomas Cty KS

GR 3091.00 ft

FORMATION: Myrick, Ft Scott, John

INTERVAL : 4534.00 To 4646.00 ft

TD 4646.00 ft

TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	AK-1	AK-1	Alpine			PF Fr. 1816 to 1846 hr
SI 45 Range(Psi)	4700.0	4700.0	4995.0	0.0	0.0	IS Fr. 1846 to 1931 hr
SF 45 Clock(hrs)	12	12	Elect			SF Fr. 1931 to 2016 hr
FS 45 Depth(ft)	4540.0	4540.0	4570.0	0.0	0.0	FS Fr. 2016 to 2101 hr

	Field	1	2	3	4	
A. Init Hydro	2366.0	2257.0	2293.0	0.0	0.0	T STARTED 1655 hr
B. First Flow	61.0	71.0	22.0	0.0	0.0	T ON BOTM 1814 hr
Bl. Final Flow	61.0	71.0	24.0	0.0	0.0	T OPEN 1816 hr
C. In Shut-in	560.0	563.0	556.0	0.0	0.0	T PULLED 2101 hr
D. Init Flow	61.0	75.0	24.0	0.0	0.0	T OUT 2225 hr
E. Final Flow	61.0	75.0	25.0	0.0	0.0	
F. Fl Shut-in	229.0	236.0	209.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2342.0	2250.0	2276.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 25000.00 lbs
						Wt Pulled Loose 80000.00 lbs
						Initial Str Wt 48000.00 lbs
						Unseated Str Wt 48000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 0.00 ft
						D.P. Length 4544.00 ft

RECOVERY

Tot Fluid 10.00 ft of 0.00 ft in DC and 10.00 ft in DP
10.00 ft of Mud

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

BLOW DESCRIPTION

Initial Flow -
Weak 1" blow building to 1.25"

Final Flow -
No blow

SAMPLES:
SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.40 lb/c
Vis.	49.00 S/L
W.L.	11.20 in3
F.C.	0.00 in
Mud Drop N	

Amt. of fill	2.00 ft
Btm. H. Temp.	119.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	none
Reversed Out N	
Tool Chased N	
Tester	Paul Simpson
Co. Rep.	Craig Caulk
Contr.	LD Drilling
Rig #	1
Unit #	
Pump T.	

Test Successful: Y

TEST HISTORY

9402 Landmark/Uess OHL SW #1-4 DST #4

Flag Points

t(Min.) P(PSig)

A: 0.00 2292.50
 B: 0.00 21.71
 C: 30.00 23.52
 D: 46.00 555.64
 E: 0.00 24.18
 F: 42.00 24.98
 G: 50.00 208.91
 Q: 0.00 2276.14

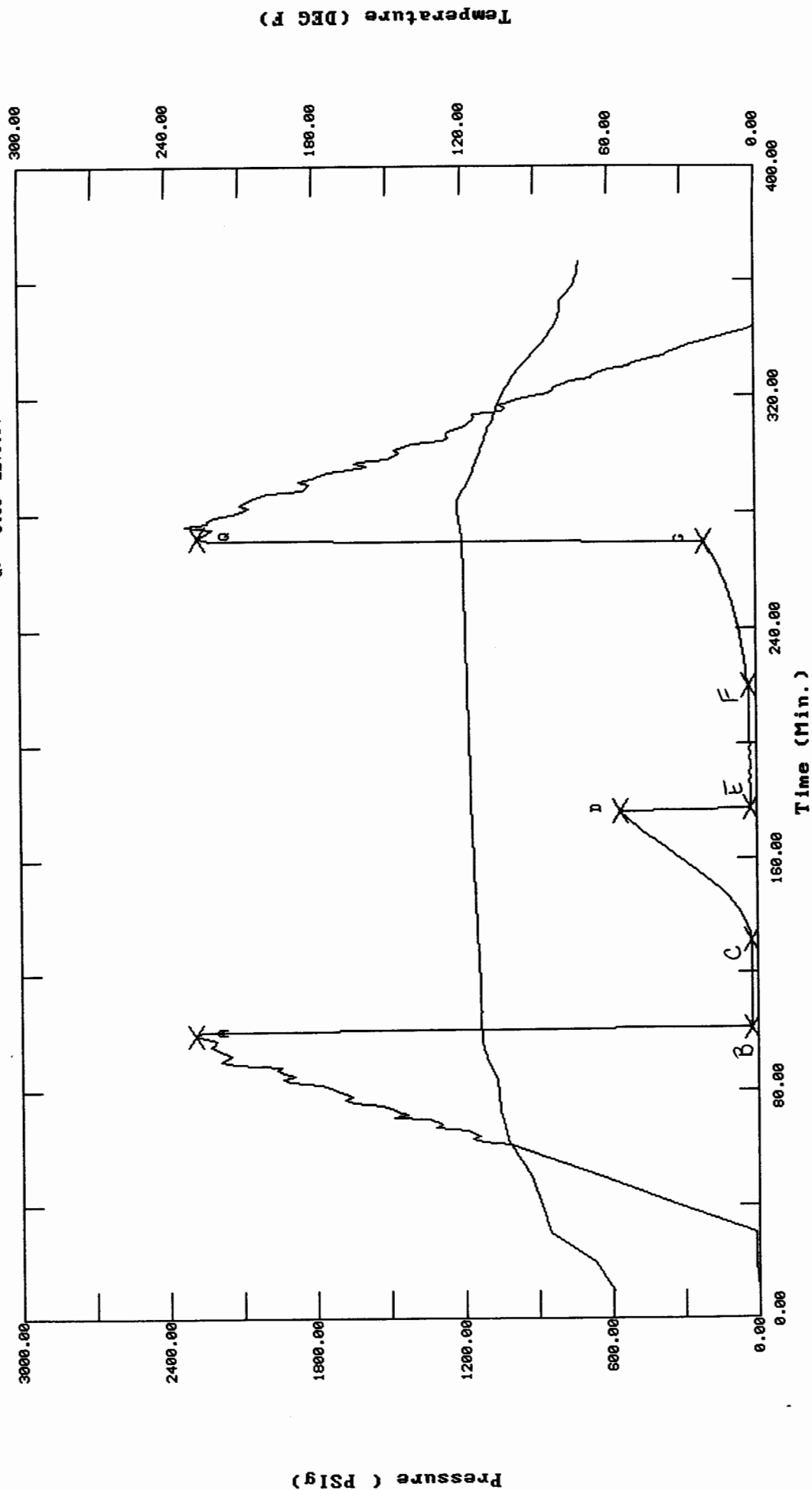
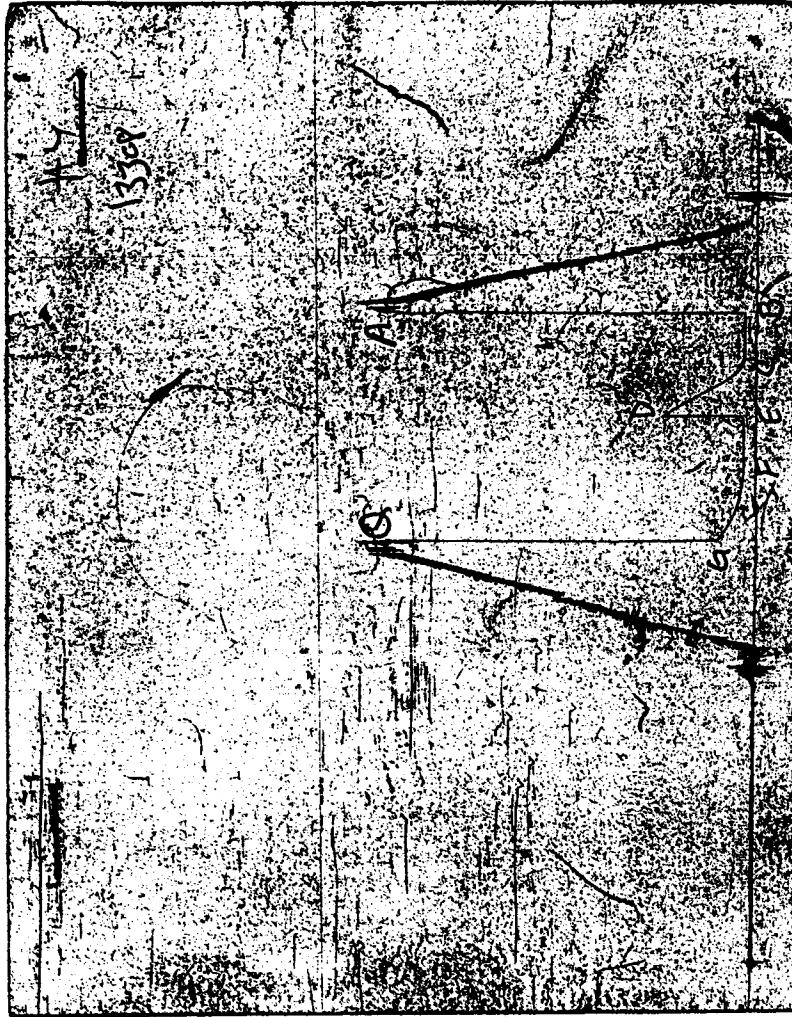


CHART PAGE



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

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9402 Landmark/Vess OHL SW #1-4 DST #4

DATE: 05/24/96

TIME: 16:35:37

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	99.00	2292.5	0.0	112.85		
***** Start Flow 1	0.00	21.7	0.0	113.10		
	1.00	22.0	0.3	113.11		
	2.00	22.2	0.5	113.08		
	3.00	22.3	0.6	113.05		
	4.00	22.4	0.7	113.02		
	5.00	22.5	0.8	113.02		
	6.00	22.6	0.9	113.00		
	7.00	22.7	1	113.01		
	8.00	22.7	1.0	113.04		
	9.00	22.8	1.1	113.07		
	10.00	22.9	1.1	113.11		
	11.00	22.8	1.1	113.15		
	12.00	22.9	1.2	113.21		
	13.00	22.9	1.2	113.26		
	14.00	22.9	1.2	113.32		
	15.00	23.0	1.3	113.36		
	16.00	23.1	1.3	113.43		
	17.00	23.1	1.4	113.49		
	18.00	23.1	1.4	113.55		
	19.00	23.1	1.4	113.61		
	20.00	23.2	1.5	113.67		
	21.00	23.2	1.5	113.73		
	22.00	23.3	1.6	113.79		
	23.00	23.1	1.4	113.85		
	24.00	23.4	1.7	113.91		
	25.00	23.4	1.7	113.98		
	26.00	23.3	1.5	114.04		
	27.00	23.2	1.5	114.09		
	28.00	23.5	1.8	114.14		
	29.00	23.6	1.8	114.20		
***** End Flow 1	30.00	23.5	1.8	114.26		
***** Start Shutin 1	0.00	23.5	0.0	114.26	0.0000	0.001
	1.00	24.7	1.1	114.31	31.0000	0.001
	2.00	27.3	3.8	114.35	16.0000	0.001
	3.00	30.5	7.0	114.40	11.0000	0.001
	4.00	34.0	10.4	114.45	8.5000	0.001
	5.00	37.7	14.2	114.51	7.0000	0.001
	6.00	42.6	19.1	114.56	6.0000	0.002
	7.00	47.0	23.5	114.62	5.2857	0.002
	8.00	52.5	29.0	114.67	4.7500	0.003
	9.00	58.5	34.9	114.72	4.3333	0.003
	10.00	65.0	41.5	114.78	4.0000	0.004
	11.00	72.2	48.7	114.83	3.7273	0.005
	12.00	79.9	56.4	114.88	3.5000	0.006
	13.00	88.6	65.1	114.95	3.3077	0.008
	14.00	97.9	74.4	114.99	3.1429	0.01
	15.00	108.1	84.6	115.05	3.0000	0.012
	16.00	118.9	95.4	115.11	2.8750	0.014
	17.00	130.5	107.0	115.16	2.7647	0.017
	18.00	142.8	119.2	115.21	2.6667	0.020

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9402 Landmark/Vess OHL SW #1-4 DST #4

DATE: 05/24/96

TIME: 16:35:37

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	19.00	155.9	132.3	115.27	2.5789	0.024
	20.00	169.7	146.2	115.33	2.5000	0.029
	21.00	184.2	160.7	115.39	2.4286	0.034
	22.00	199.0	175.5	115.44	2.3636	0.040
	23.00	214.9	191.3	115.49	2.3043	0.046
	24.00	230.4	206.9	115.55	2.2500	0.053
	25.00	246.2	222.7	115.60	2.2000	0.061
	26.00	262.1	238.5	115.65	2.1538	0.069
	27.00	278.0	254.5	115.70	2.1111	0.077
	28.00	293.9	270.3	115.76	2.0714	0.086
	29.00	310.0	286.4	115.81	2.0345	0.096
	30.00	325.7	302.2	115.86	2.0000	0.106
	31.00	341.6	318.1	115.92	1.9677	0.117
	32.00	357.4	333.9	115.97	1.9375	0.128
	33.00	372.4	348.9	116.01	1.9091	0.139
	34.00	388.0	364.5	116.07	1.8824	0.151
	35.00	403.6	380.1	116.12	1.8571	0.163
	36.00	418.9	395.4	116.17	1.8333	0.175
	37.00	434.2	410.7	116.22	1.8108	0.189
	38.00	449.1	425.6	116.27	1.7895	0.202
	39.00	463.9	440.3	116.31	1.7692	0.215
	40.00	478.3	454.8	116.37	1.7500	0.229
	41.00	492.7	469.2	116.42	1.7317	0.243
	42.00	506.7	483.2	116.46	1.7143	0.257
	43.00	520.6	497.0	116.52	1.6977	0.271
	44.00	534.2	510.7	116.56	1.6818	0.285
	45.00	547.7	524.2	116.60	1.6667	0.300
***** End Shut-in 1	46.00	555.6	532.1	116.65	1.6522	0.309
***** Start Flow 2	0.00	24.2	0.0	116.69		
	1.00	23.9	-0.2	116.70		
	2.00	24.4	0.2	116.72		
	3.00	24.1	-0.1	116.72		
	4.00	24.4	0.2	116.75		
	5.00	24.2	0.0	116.76		
	6.00	24.3	0.2	116.78		
	7.00	24.4	0.2	116.82		
	8.00	24.6	0.4	116.85		
	9.00	24.8	0.6	116.88		
	10.00	24.3	0.2	116.91		
	11.00	24.4	0.2	116.94		
	12.00	24.9	0.7	116.97		
	13.00	24.3	0.1	117.01		
	14.00	24.4	0.2	117.05		
	15.00	24.5	0.4	117.08		
	16.00	24.4	0.3	117.13		
	17.00	24.7	0.5	117.17		
	18.00	24.6	0.4	117.20		
	19.00	24.6	0.4	117.24		
	20.00	25.1	1	117.28		
	21.00	24.6	0.4	117.32		
	22.00	24.6	0.4	117.35		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9402 Landmark/Vess OHL SW #1-4 DST #4

DATE: 05/24/96

TIME: 16:35:37

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	23.00	24.6	0.5	117.40		
	24.00	24.7	0.5	117.43		
	25.00	24.7	0.5	117.48		
	26.00	24.7	0.5	117.51		
	27.00	24.7	0.5	117.56		
	28.00	24.9	0.7	117.60		
	29.00	24.8	0.6	117.63		
	30.00	24.8	0.6	117.67		
	31.00	24.8	0.6	117.70		
	32.00	24.8	0.6	117.74		
	33.00	24.8	0.6	117.78		
	34.00	24.8	0.6	117.81		
	35.00	24.8	0.6	117.85		
	36.00	24.8	0.6	117.89		
	37.00	24.8	0.6	117.93		
	38.00	24.9	0.7	117.96		
	39.00	25.0	0.8	118.00		
	40.00	24.8	0.7	118.03		
	41.00	25.0	0.8	118.07		
***** End Flow 2	42.00	25.0	0.8	118.11		
***** Start Shutin 2	0.00	25.0	0.0	118.11	0.0000	0.001
	1.00	30.5	5.5	118.14	73.0000	0.001
	2.00	36.4	11.4	118.18	37.0000	0.001
	3.00	37.6	12.6	118.21	25.0000	0.001
	4.00	38.8	13.8	118.24	19.0000	0.002
	5.00	40.0	15.0	118.28	15.4000	0.002
	6.00	41.3	16.3	118.32	13.0000	0.002
	7.00	42.6	17.7	118.36	11.2857	0.002
	8.00	44.1	19.1	118.39	10.0000	0.002
	9.00	45.7	20.7	118.42	9.0000	0.002
	10.00	47.3	22.4	118.46	8.2000	0.002
	11.00	49.2	24.2	118.49	7.5455	0.002
	12.00	51.1	26.1	118.53	7.0000	0.003
	13.00	53.0	28.1	118.56	6.5385	0.003
	14.00	55.1	30.1	118.60	6.1429	0.003
	15.00	57.2	32.2	118.63	5.8000	0.003
	16.00	59.4	34.4	118.67	5.5000	0.004
	17.00	61.6	36.6	118.70	5.2353	0.004
	18.00	64.0	39.0	118.73	5.0000	0.004
	19.00	66.4	41.4	118.77	4.7895	0.004
	20.00	68.9	43.9	118.79	4.6000	0.005
	21.00	71.4	46.4	118.83	4.4286	0.005
	22.00	73.9	49.0	118.87	4.2727	0.005
	23.00	76.4	51.4	118.90	4.1304	0.006
	24.00	79.1	54.1	118.94	4.0000	0.006
	25.00	82.3	57.3	118.98	3.8800	0.007
	26.00	85.5	60.6	119.01	3.7692	0.007
	27.00	88.8	63.9	119.03	3.6667	0.008
	28.00	92.2	67.3	119.07	3.5714	0.009
	29.00	95.7	70.7	119.10	3.4828	0.009
	30.00	99.4	74.4	119.14	3.4000	0.01

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9402 Landmark/Vess OHL SW #1-4 DST #4

DATE: 05/24/96

TIME: 16:35:37

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	31.00	103.1	78.1	119.17	3.3226	0.011
	32.00	107.0	82.0	119.20	3.2500	0.011
	33.00	111.1	86.1	119.24	3.1818	0.012
	34.00	115.3	90.3	119.27	3.1176	0.013
	35.00	119.7	94.8	119.30	3.0571	0.014
	36.00	124.3	99.4	119.34	3.0000	0.015
	37.00	129.2	104.2	119.37	2.9459	0.017
	38.00	134.2	109.2	119.40	2.8947	0.018
	39.00	139.4	114.4	119.45	2.8462	0.019
	40.00	144.7	119.7	119.47	2.8000	0.021
	41.00	150.3	125.3	119.50	2.7561	0.023
	42.00	156.0	131.0	119.54	2.7143	0.024
	43.00	162.0	137.0	119.57	2.6744	0.026
	44.00	168.1	143.2	119.61	2.6364	0.028
	45.00	174.4	149.5	119.63	2.6000	0.030
	46.00	180.9	155.9	119.66	2.5652	0.033
	47.00	187.6	162.6	119.70	2.5319	0.035
	48.00	194.5	169.6	119.72	2.5000	0.038
	49.00	201.6	176.6	119.76	2.4694	0.041
***** End Shut-in 2	50.00	208.9	183.9	119.80	2.4400	0.044
***** Final Hydro.	272.00	2276.1	0.0	119.98		

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: OHL Southwest #1-4

LOCATION : 04-10S-32W, Thomas Cty KS

TICKET No. 9402 D.S.T. No. 4 DATE 5-24-96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 20

TOTAL TOOL 40

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands 1 Single 1 Total 92

TOTAL ASSEMBLY 132

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands65 Single 1 Total 4544

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4676

TOTAL DEPTH 4646

TOTAL DRILL PIPE ABOVE K.B. 30

REMARKS:

P.O. SUB	
C.O. SUB top of tool	4514
S.I. TOOL H&T	4520
HMV Sterling	4525
JARS n/a	
SAFETY JOINT n/a	
PACKER Top Packer	4529
PACKER Bottom Packer	4534
DEPTH 4534	
STUBB 4535	
ANCHOR	
5' perf	4540
Ak-1 recorder	4540
1 Joint pipe	4570
Alpine recorder	4570
1 std pipe & subs	4633
T.C.	
DEPTH	
5' perf	4638
5'perf	4643
3' bull plug	
BULLNOSE	to
T.D.	4646

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 9402

Well Name & No. <u>OHZ SW "1-4"</u>	Test No. <u>9</u>	Date <u>5-24-96</u>
Company <u>Landmark / Vess</u>	Zone Tested <u>Myrick Station Fracture - Johnson 2.0</u>	
Address _____	Elevation <u>3096</u>	KB <u>3091</u> GL
Co. Rep / Geo. <u>Craig Calk</u>	Cont. <u>LD</u>	Est. Ft. of Pay _____ Por. _____ %
Location: Sec. <u>4</u>	Twp. <u>10s</u>	Rge. <u>32w</u> Co. <u>Thomas</u> State <u>Ks</u>
No. of Copies _____	Distribution Sheet (Y, N) _____	Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested <u>4534 - 4646</u>	Initial Str Wt./Lbs. <u>48,000</u>	Unseated Str Wt./Lbs. _____
Anchor Length <u>112</u>	Wt. Set Lbs. _____	Wt. Pulled Loose/Lbs. _____
Top Packer Depth <u>4529</u>	Tool Weight _____	
Bottom Packer Depth <u>4534</u>	Hole Size — <u>7 7/8"</u>	Rubber Size — <u>6 3/4"</u>
Total Depth <u>4646</u>	Wt. Pipe Run _____	Drill Collar Run _____
Mud Wt. <u>9.4</u> LCM _____ Vis. <u>49</u> WL <u>11.2</u>	Drill Pipe Size <u>4 1/2</u>	Ft. Run <u>4544</u>
Blow Description <u>weak 1" blow building to 1 1/2"</u>		

Recovery — Total Feet <u>10</u>	GIP _____	Ft. in DC _____	Ft. in DP <u>10</u>
Rec. <u>10</u> Feet Of <u>mud</u>	%gas _____	%oil _____	%water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____	%oil _____	%water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____	%oil _____	%water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____	%oil _____	%water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____	%oil _____	%water _____ %mud _____
BHT <u>119</u> °F Gravity _____	°API D@ _____	°F Corrected Gravity _____	°API _____
RW _____ @ _____ °F Chlorides _____	ppm Recovery _____	Chlorides _____	ppm System _____
(A) Initial Hydrostatic Mud <u>2366</u>	<u>2293</u> PSI Recorder No. <u>3024</u>	T-Started <u>1655</u>	
(B) First Initial Flow Pressure <u>61</u>	<u>22</u> PSI (depth) <u>4570</u>	T-Open <u>1816</u>	
(C) First Final Flow Pressure <u>61</u>	<u>24</u> PSI Recorder No. <u>13308</u>	T-Pulled <u>2101</u>	
(D) Initial Shut-in Pressure <u>560</u>	<u>556</u> PSI (depth) <u>4540</u>	T-Out <u>2225</u>	
(E) Second Initial Flow Pressure <u>61</u>	<u>24</u> PSI Recorder No. _____		
(F) Second Final Flow Pressure <u>61</u>	<u>25</u> PSI (depth) _____		
(G) Final Shut-in Pressure <u>229</u>	<u>209</u> PSI Initial Opening <u>30</u>	Test _____ <u>6000</u>	
(H) Final Hydrostatic Mud <u>2342</u>	<u>2226</u> PSI Initial Shut-in <u>45</u>	Jars _____	
<u>AK-1</u>	Final Flow <u>45</u>	Safety Joint _____	
	Final Shut-in <u>45</u>	Straddle _____	

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 _____

Circ. Sub _____
Sampler _____
Extra Packer _____
Elect. Rec. 150
Other _____
TOTAL PRICE \$ 750

TRILOBITE TESTING L.L.C.

OPERATOR : Landmark Exp/Vess Oil
WELL NAME: OHL Southwest #1-4
LOCATION : 4-10S-32W, Thomas Cty KS
INTERVAL : 4700.00 To 4720.00 ft

DATE 5-25-96
KB 3097.00 ft
GR 3092.00 ft
TD 4720.00 ft

TICKET NO: 8778
FORMATION: Miss
TEST TYPE: CONV.

DST #5

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 45 Rec.	AK-1	AK-1	Alpine			PF Fr. 1119 to 1204 hr
SI 45 Range(Psi)	4500.0	4500.0	4995.0	0.0	0.0	IS Fr. 1204 to 1249 hr
SF 45 Clock(hrs)	12	12	Elect			SF Fr. 1249 to 1334 hr
FS 60 Depth(ft)	4715.0	4715.0	4701.0	0.0	0.0	FS Fr. 1334 to 1434 hr

	Field	1	2	3	4	
A. Init Hydro	2328.0	2332.0	2354.0	0.0	0.0	T STARTED 0956 hr
B. First Flow	100.0	83.0	22.0	0.0	0.0	T ON BOTM 1116 hr
B1. Final Flow	77.0	76.0	21.0	0.0	0.0	T OPEN 1119 hr
C. In Shut-in	1108.0	1111.0	1109.0	0.0	0.0	T PULLED 1434 hr
D. Init Flow	100.0	82.0	20.0	0.0	0.0	T OUT 1625 hr
E. Final Flow	77.0	93.0	29.0	0.0	0.0	
F. Fl Shut-in	1075.0	1082.0	1080.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2356.0	2312.0	2325.0	0.0	0.0	Tool Wt. 4000.00 lbs
Inside/Outside	O	O	I			Wt Set On Packer 26000.00 lbs
						Wt Pulled Loose 70000.00 lbs
						Initial Str Wt 47000.00 lbs
						Unseated Str Wt 47000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 0.00 ft
						D.P. Length 4696.00 ft

RECOVERY

Tot Fluid 65.00 ft of 0.00 ft in DC and 65.00 ft in DP
65.00 ft of Watery mud w/ oil scum - 35% water, 65% mud

RW .69 @ 53 F
SALINITY 12200.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow -
Surface blow built to 2"

Initial Shutin -
No return

Final Flow -
Bubble to open tool, no blow

Final Shutin -
No return

SAMPLES:
SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.30 lb/c
Vis.	47.00 S/L
W.L.	11.20 in3
F.C.	0.00 in
Mud Drop Y	30.0 ft
Amt. of fill	0.00 ft
Btm. H. Temp.	133.00 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	Shane McBride
Co. Rep.	Craig Caulk
Contr.	L D
Rig #	1
Unit #	
Pump T.	

Test Successful: Y

TEST HISTORY 8778 DST #5 OHL Southwest 1-4 Landmark

Flag Points

t (Min.) P (PSig)

A: 0.00 2354.08
 B: 0.00 21.64
 C: 45.00 20.55
 D: 44.00 1109.27
 E: 0.00 19.80
 F: 45.00 28.61
 G: 59.00 1079.81
 Q: 0.00 2324.79

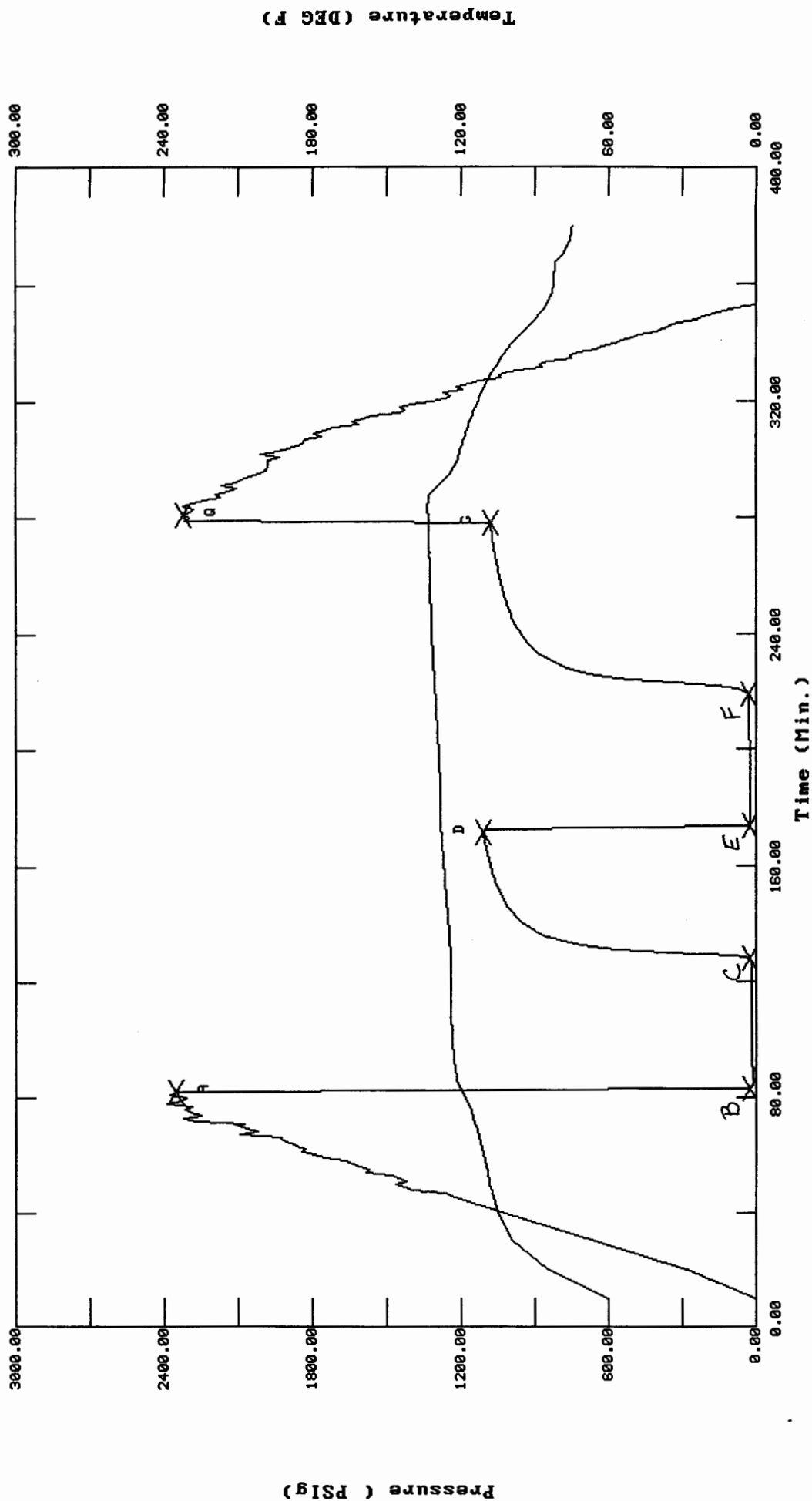
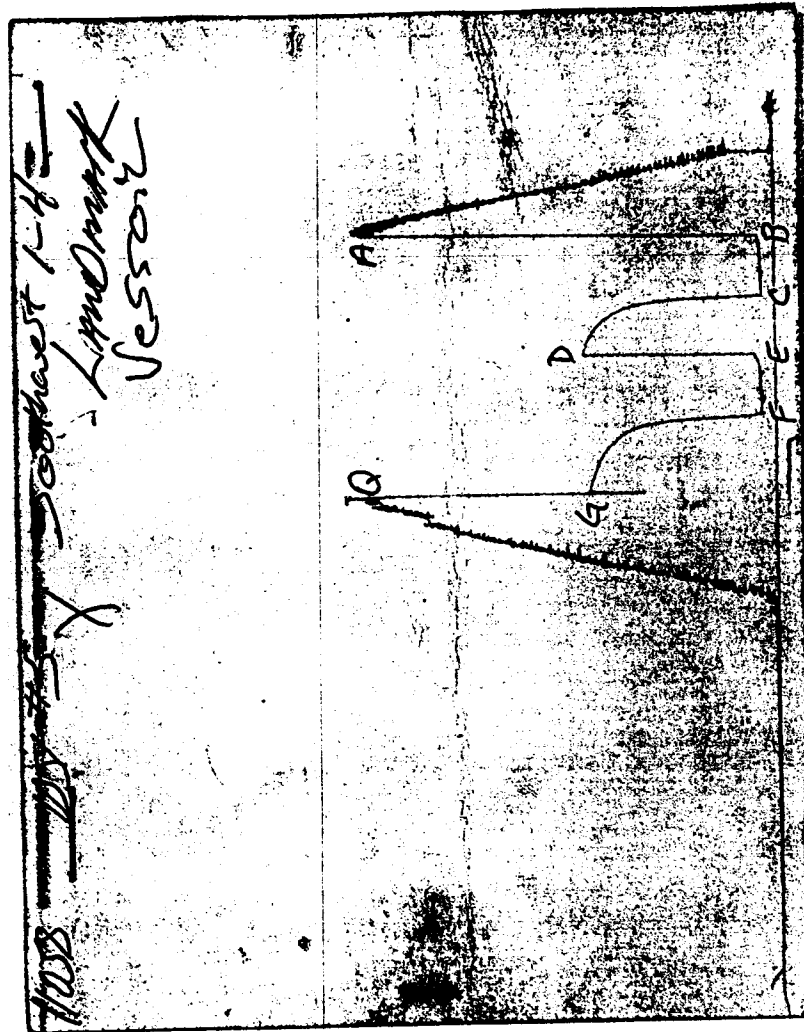


CHART PAGE



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

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8778 DST #5 OHL Southwest 1-4 Landmark

DATE: 05/25/96 TIME: 08:20:16

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	82.00	2354.1	0.0	119.35		
***** Start Flow 1	0.00	21.6	0.0	119.99		
	1.00	12.5	-9.1	120.57		
	2.00	12.0	-9.7	121.05		
	3.00	11.7	-9.9	121.44		
	4.00	12.5	-9.1	121.73		
	5.00	12.2	-9.5	121.97		
	6.00	12.2	-9.4	122.14		
	7.00	12.6	-9.1	122.30		
	8.00	12.7	-9.0	122.46		
	9.00	12.7	-8.9	122.64		
	10.00	12.8	-8.8	122.83		
	11.00	13.2	-8.5	123.00		
	12.00	13.3	-8.3	123.12		
	13.00	13.6	-8.1	123.22		
	14.00	13.8	-7.9	123.28		
	15.00	13.9	-7.7	123.33		
	16.00	14.2	-7.5	123.37		
	17.00	14.3	-7.4	123.41		
	18.00	14.5	-7.1	123.45		
	19.00	14.8	-6.9	123.51		
	20.00	14.9	-6.7	123.59		
	21.00	15.1	-6.5	123.67		
	22.00	15.2	-6.5	123.75		
	23.00	15.4	-6.2	123.85		
	24.00	15.5	-6.1	123.94		
	25.00	15.7	-6.0	124.03		
	26.00	15.9	-5.8	124.10		
	27.00	16.1	-5.5	124.17		
	28.00	16.2	-5.5	124.21		
	29.00	16.4	-5.2	124.24		
	30.00	16.6	-5.0	124.28		
	31.00	16.8	-4.9	124.30		
	32.00	17.0	-4.6	124.31		
	33.00	17.1	-4.5	124.32		
	34.00	17.3	-4.4	124.33		
	35.00	17.4	-4.3	124.34		
	36.00	17.6	-4.0	124.36		
	37.00	17.7	-3.9	124.37		
	38.00	17.9	-3.8	124.38		
	39.00	18.0	-3.7	124.40		
	40.00	18.1	-3.5	124.41		
	41.00	18.2	-3.4	124.41		
	42.00	18.4	-3.3	124.40		
	43.00	18.5	-3.1	124.39		
	44.00	18.6	-3.0	124.36		
***** End Flow 1	45.00	20.6	-1.1	124.34		
***** Start Shutin 1	0.00	20.6	0.0	124.34	0.0000	0.000
	1.00	80.8	60.3	124.33	46.0000	0.007
	2.00	365.0	344.4	124.33	23.5000	0.133
	3.00	564.8	544.3	124.35	16.0000	0.319

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING
 TEST: 8778 DST #5 OHL Southwest 1-4 Landmark
 DATE: 05/25/96 TIME: 08:20:16

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	4.00	668.6	648.1	124.39	12.2500	0.447
	5.00	735.8	715.2	124.45	10.0000	0.541
	6.00	784.6	764.1	124.51	8.5000	0.616
	7.00	822.6	802.0	124.58	7.4286	0.677
	8.00	853.2	832.6	124.65	6.6250	0.728
	9.00	878.9	858.3	124.74	6.0000	0.772
	10.00	900.7	880.2	124.82	5.5000	0.811
	11.00	919.5	899.0	124.91	5.0909	0.845
	12.00	936.0	915.4	125.00	4.7500	0.876
	13.00	950.4	929.8	125.09	4.4615	0.903
	14.00	963.6	943.0	125.19	4.2143	0.928
	15.00	975.2	954.7	125.28	4.0000	0.951
	16.00	985.8	965.3	125.38	3.8125	0.972
	17.00	995.5	974.9	125.48	3.6471	0.991
	18.00	1004.3	983.7	125.56	3.5000	1.009
	19.00	1012.3	991.8	125.66	3.3684	1.025
	20.00	1019.8	999.2	125.76	3.2500	1.040
	21.00	1026.7	1006.1	125.85	3.1429	1.054
	22.00	1033.2	1012.7	125.95	3.0455	1.068
	23.00	1039.0	1018.5	126.04	2.9565	1.080
	24.00	1044.6	1024.1	126.14	2.8750	1.091
	25.00	1049.8	1029.3	126.23	2.8000	1.102
	26.00	1054.6	1034.1	126.32	2.7308	1.112
	27.00	1059.2	1038.6	126.42	2.6667	1.122
	28.00	1063.5	1043.0	126.52	2.6071	1.131
	29.00	1067.5	1046.9	126.63	2.5517	1.139
	30.00	1071.3	1050.8	126.71	2.5000	1.148
	31.00	1074.9	1054.4	126.81	2.4516	1.155
	32.00	1078.4	1057.8	126.91	2.4062	1.163
	33.00	1081.7	1061.1	127.01	2.3636	1.170
	34.00	1084.7	1064.1	127.10	2.3235	1.177
	35.00	1087.8	1067.2	127.22	2.2857	1.183
	36.00	1090.5	1070.0	127.32	2.2500	1.189
	37.00	1093.2	1072.7	127.43	2.2162	1.195
	38.00	1096.0	1075.5	127.53	2.1842	1.201
	39.00	1098.4	1077.8	127.63	2.1538	1.206
	40.00	1100.7	1080.2	127.71	2.1250	1.212
	41.00	1103.0	1082.4	127.81	2.0976	1.217
	42.00	1105.2	1084.6	127.89	2.0714	1.221
	43.00	1107.3	1086.7	127.97	2.0465	1.226
***** End Shut-in 1	44.00	1109.3	1088.7	128.03	2.0227	1.230
***** Start Flow 2	0.00	19.8	0.0	128.07		
	1.00	19.8	0.0	128.09		
	2.00	19.9	0.1	128.09		
	3.00	20.1	0.3	128.10		
	4.00	20.3	0.5	128.11		
	5.00	20.6	0.8	128.12		
	6.00	20.7	0.9	128.14		
	7.00	20.8	1.0	128.16		
	8.00	21.0	1.2	128.18		
	9.00	21.1	1.3	128.22		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8778 DST #5 OHL Southwest 1-4 Landmark

DATE: 05/25/96

TIME: 08:20:16

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	10.00	21.3	1.5	128.25		
	11.00	21.4	1.6	128.29		
	12.00	21.6	1.8	128.33		
	13.00	21.8	2.0	128.38		
	14.00	22.0	2.2	128.42		
	15.00	22.1	2.3	128.47		
	16.00	22.2	2.4	128.52		
	17.00	22.3	2.5	128.57		
	18.00	22.6	2.8	128.63		
	19.00	22.7	2.9	128.68		
	20.00	22.8	3.0	128.73		
	21.00	22.9	3.1	128.79		
	22.00	23.2	3.4	128.84		
	23.00	23.3	3.5	128.90		
	24.00	23.6	3.8	128.96		
	25.00	23.7	3.9	129.03		
	26.00	23.9	4.1	129.09		
	27.00	24.1	4.3	129.17		
	28.00	24.3	4.5	129.23		
	29.00	24.6	4.8	129.30		
	30.00	24.7	4.9	129.36		
	31.00	24.8	5.0	129.43		
	32.00	24.9	5.1	129.50		
	33.00	25.1	5.3	129.57		
	34.00	25.2	5.4	129.64		
	35.00	25.3	5.5	129.71		
	36.00	25.4	5.6	129.78		
	37.00	25.7	5.9	129.85		
	38.00	25.8	6.0	129.91		
	39.00	26.0	6.2	129.98		
	40.00	26.1	6.3	130.04		
	41.00	26.2	6.4	130.11		
	42.00	26.3	6.5	130.18		
	43.00	26.5	6.7	130.24		
	44.00	26.6	6.8	130.31		
***** End Flow 2	45.00	28.6	8.8	130.37		
***** Start Shutin 2	0.00	28.6	0.0	130.37	0.0000	0.001
	1.00	44.6	15.9	130.44	91.0000	0.002
	2.00	77.3	48.7	130.50	46.0000	0.006
	3.00	159.0	130.3	130.57	31.0000	0.025
	4.00	336.4	307.8	130.64	23.5000	0.113
	5.00	507.6	479.0	130.72	19.0000	0.258
	6.00	613.1	584.5	130.81	16.0000	0.376
	7.00	681.4	652.8	130.90	13.8571	0.464
	8.00	730.1	701.5	130.98	12.2500	0.533
	9.00	767.7	739.1	131.07	11.0000	0.589
	10.00	797.8	769.2	131.15	10.0000	0.636
	11.00	822.9	794.3	131.23	9.1818	0.677
	12.00	844.2	815.6	131.29	8.5000	0.713
	13.00	862.6	834.0	131.37	7.9231	0.744
	14.00	878.8	850.2	131.44	7.4286	0.772

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING
 TEST: 8778 DST #5 OHL Southwest 1-4 Landmark
 DATE: 05/25/96 TIME: 08:20:16

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	15.00	893.1	864.5	131.51	7.0000	0.798
	16.00	905.8	877.2	131.56	6.6250	0.821
	17.00	917.5	888.9	131.62	6.2941	0.842
	18.00	927.9	899.3	131.68	6.0000	0.861
	19.00	937.5	908.9	131.74	5.7368	0.879
	20.00	946.3	917.7	131.80	5.5000	0.895
	21.00	954.3	925.7	131.84	5.2857	0.911
	22.00	961.8	933.2	131.89	5.0909	0.925
	23.00	968.9	940.2	131.93	4.9130	0.939
	24.00	975.3	946.7	131.97	4.7500	0.951
	25.00	981.4	952.7	132.02	4.6000	0.963
	26.00	987.1	958.5	132.05	4.4615	0.974
	27.00	992.4	963.8	132.08	4.3333	0.985
	28.00	997.5	968.9	132.12	4.2143	0.995
	29.00	1002.3	973.6	132.15	4.1034	1.005
	30.00	1006.7	978.1	132.19	4.0000	1.013
	31.00	1011.0	982.4	132.22	3.9032	1.022
	32.00	1015.0	986.4	132.25	3.8125	1.030
	33.00	1019.0	990.3	132.29	3.7273	1.038
	34.00	1022.7	994.0	132.32	3.6471	1.046
	35.00	1026.0	997.4	132.37	3.5714	1.053
	36.00	1029.4	1000.8	132.40	3.5000	1.060
	37.00	1032.6	1003.9	132.43	3.4324	1.066
	38.00	1035.7	1007.1	132.46	3.3684	1.073
	39.00	1038.6	1010.0	132.50	3.3077	1.079
	40.00	1041.4	1012.8	132.53	3.2500	1.084
	41.00	1044.1	1015.5	132.55	3.1951	1.090
	42.00	1046.8	1018.2	132.59	3.1429	1.096
	43.00	1049.3	1020.7	132.62	3.0930	1.101
	44.00	1051.8	1023.2	132.65	3.0455	1.106
	45.00	1054.0	1025.3	132.69	3.0000	1.111
	46.00	1056.2	1027.6	132.72	2.9565	1.116
	47.00	1058.5	1029.9	132.76	2.9149	1.120
	48.00	1060.5	1031.9	132.86	2.8750	1.125
	49.00	1062.6	1034.0	132.81	2.8367	1.129
	50.00	1064.5	1035.9	132.85	2.8000	1.133
	51.00	1066.4	1037.8	132.88	2.7647	1.137
	52.00	1068.4	1039.8	132.91	2.7308	1.141
	53.00	1070.2	1041.5	132.94	2.6981	1.145
	54.00	1071.8	1043.2	132.97	2.6667	1.149
	55.00	1073.5	1044.9	132.99	2.6364	1.152
	56.00	1075.3	1046.7	133.04	2.6071	1.156
	57.00	1076.8	1048.2	133.07	2.5789	1.159
	58.00	1078.3	1049.7	133.09	2.5517	1.163
***** End Shut-in 2	59.00	1079.8	1051.2	133.12	2.5254	1.166
***** Final Hydro.	281.00	2324.8	0.0	133.37		

*** TOOL DIAGRAM *** CONV.

WELL NAME: OHL Southwest 1-4

LOCATION : 4-10S-32W, Thomas Cty KS

TICKET No. 8778 D.S.T. No. 5 DATE 5-25-96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 21

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 20

TOTAL TOOL 41

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 41

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands76 Single Total 4696

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4737

TOTAL DEPTH 4720

TOTAL DRILL PIPE ABOVE K.B. 17

REMARKS:

P.O. SUB

C.O. SUB 1' 4679

S.I. TOOL 5' 4685

HMV 5' 4690

JARS n/a

SAFETY JOINT n/a

PACKER top 4695

PACKER bottom 4700

DEPTH 4700

STUBB 1' 4701

ANCHOR alpine 4701

14'-perf 4715

T.C.
DEPTH

AK-1 4715

BULLNOSE 5' bullplug
T.D. 4720

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 8778

Well Name & No.	<u>OHLSouthwest #1-4</u>		Test No.	<u>5</u>	Date	<u>5-25-96</u>
Company	<u>Landmark Energy Exp. Vess Oil Corp.</u>		Zone Tested	<u>MISS.</u>		
Address	<u>1861 W. Rock Road, Suite 205 Wichita, KS 67206</u>		Elevation	<u>3097</u>	KB	<u>3092</u> GL
Co. Rep / Geo.	<u>Craig Caulk</u>	Cont.	<u>L.D. PRO #1</u>	Est. Ft. of Pay	___	Por. ___ %
Location: Sec.	<u>47</u>	Twp.	<u>10</u>	Rge.	<u>32</u>	Co. <u>Thomas</u> State <u>KS</u>
No. of Copies	<u>1000</u>	Distribution Sheet (Y, N)	<u>N</u>	Turnkey (Y, N)	<u>N</u>	Evaluation (Y, N) <u>N</u>

Interval Tested	<u>4700' - 4720'</u>	Initial Str Wt./Lbs.	<u>47000</u>	Unseated Str Wt./Lbs.	<u>47000</u>
Anchor Length	<u>20'</u>	Wt. Set Lbs.	<u>26,000</u>	Wt. Pulled Loose/Lbs.	<u>20,000</u>
Top Packer Depth	<u>4695'</u>	Hole Size — 7 7/8" ☒	Rubber Size — 6 3/4" ☒		
Bottom Packer Depth	<u>4720'</u>	Wt. Pipe I.D. — 2.7 Ft. Run	___		
Total Depth	<u>4720'</u>	Drill Collar — 2.25 Ft. Run	___		
Mud Wt. <u>9.3</u> LCM <u>Trace</u> Vis. <u>47</u> WL <u>11.2</u>	Drill Pipe Size <u>4 1/2 XH</u>		Ft. Run <u>4696'</u>		
Blow Description <u>Surface blow built to 2" in.</u>					

ISI: No return.
 F.F. Bubble to open tool - No Blow
 F.S.F. No return

Recovery — Total Feet	<u>65'</u>	Ft. in DC	___	Ft. in WP	___	Ft. in DP	<u>65'</u>
Rec. <u>65'</u>	Feet Of	<u>Watery Mud, oil, s.s.</u>	%gas	<u>50%</u>	%oil	<u>35%</u>	%water <u>65%</u> %mud
Rec. ___	Feet Of	___	%gas	___	%oil	___	%water ___ %mud
Rec. ___	Feet Of	___	%gas	___	%oil	___	%water ___ %mud
Rec. ___	Feet Of	___	%gas	___	%oil	___	%water ___ %mud
Rec. ___	Feet Of	___	%gas	___	%oil	___	%water ___ %mud

BHT 133° °F Gravity ___ °API D@ ___ °F Corrected Gravity ___ °API
 RW 169 @ 53 °F Chlorides 12,200 ppm Recovery Chlorides 2,200 ppm System

(A) Initial Hydrostatic Mud	<u>2328</u>	<u>2377</u>	PSI	Recorder No.	<u>2342</u>	T-Started	<u>9:56 AM</u>
(B) First Initial Flow Pressure	<u>100</u>	<u>21</u>	PSI	@ (depth)	<u>4701'</u>	T-Open	<u>11:19 AM</u>
(C) First Final Flow Pressure	<u>77</u>	<u>18</u>	PSI	Recorder No.	<u>11058</u>	T-Pulled	<u>14:34 P.M.</u>
(D) Initial Shut-in Pressure	<u>1108</u>	<u>1109</u>	PSI	@ (depth)	<u>4715'</u>	T-Out	<u>16:25 P.M.</u>
(E) Second Initial Flow Pressure	<u>100</u>	<u>19</u>	PSI	Recorder No.	___		
(F) Second Final Flow Pressure	<u>77</u>	<u>28</u>	PSI	@ (depth)	___		
(G) Final Shut-in Pressure	<u>1075</u>	<u>1079</u>	PSI	Initial Opening	<u>45</u>	Test X	<u>600</u>
(H) Final Hydrostatic Mud	<u>2356</u>	<u>2324</u>	PSI	Initial Shut-in	<u>45</u>	Jars	___
				Final Flow	<u>45</u>	Safety Joint	___
				Final Shut-in	<u>60</u>	Straddle	___
						Circ. Sub X <u>W/C</u>	___
						Sampler	___
						Extra Packer	___
						Elect. Rec. X <u>150</u>	___
						Other	___
						TOTAL PRICE \$	<u>750</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 Craig Caulk
 Our Representative Shane McPherson

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 D

TRILOBITE TESTING L.L.C.

OPERATOR : Landmark Exp/Vess Oil

DATE 5-25-96

WELL NAME: Southwest #1-4

KB 3097.00 ft

TICKET NO: 8779

DST #6

LOCATION : 4-10S-32W, Thomas Cty KS

GR 3092.00 ft

FORMATION: Basal Sand

INTERVAL : 4598.00 To 4681.00 ft

TD 4720.00 ft

TEST TYPE: CONV STRADDLE

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 45 Rec.	AK-1	AK-1	Alpine			PF Fr. 2125 to 2210 hr
SI 45 Range(Psi)	4500.0	4500.0	4995.0	0.0	0.0	IS Fr. 2210 to 2255 hr
SF 45 Clock(hrs)	12	12	Elect			SF Fr. 2255 to 2340 hr
FS 60 Depth(ft)	4715.0	4715.0	4610.0	0.0	0.0	FS Fr. 2340 to 0040 hr

	Field	1	2	3	4	
A. Init Hydro	2451.0	2433.0	2376.0	0.0	0.0	T STARTED 2011 hr
B. First Flow	0.0	0.0	21.0	0.0	0.0	T ON BOTM 2122 hr
B1. Final Flow	0.0	0.0	37.0	0.0	0.0	T OPEN 2125 hr
C. In Shut-in	0.0	0.0	1070.0	0.0	0.0	T PULLED 0040 hr
D. Init Flow	0.0	0.0	39.0	0.0	0.0	T OUT 0315 hr
E. Final Flow	0.0	0.0	52.0	0.0	0.0	
F. Fl Shut-in	0.0	0.0	1044.0	0.0	0.0	
G. Final Hydro	2429.0	2386.0	2292.0	0.0	0.0	TOOL DATA-----
Inside/Outside	T	T	I			Tool Wt. 6000.00 lbs

RECOVERY

Tot Fluid 90.00 ft of 0.00 ft in DC and 90.00 ft in DP
 90.00 ft of Slightly gassy oil cut watery mud -
 5% gas, 20% oil, 25% water, 50% mud

TOOL DATA-----
 Tool Wt. 6000.00 lbs
 Wt Set On Packer 30000.00 lbs
 Wt Pulled Loose 87000.00 lbs
 Initial Str Wt 52000.00 lbs
 Unseated Str Wt 53000.00 lbs
 Bot Choke 0.75 in
 Hole Size 7.88 in
 D Col. ID 2.25 in
 D. Pipe ID 3.80 in
 D.C. Length 62.00 ft
 D.P. Length 4634.00 ft

RW .36 @ 60 F

SALINITY 21200.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow -
 Surface blow built to 3"

Initial Shutin -
 No return

Final Flow -
 Surface blow built to 1.75"

Final Shutin -
 No return

SAMPLES:

SENT TO:

MUD DATA-----
 Mud Type Chemical
 Weight 9.30 lb/c
 Vis. 48.00 S/L
 W.L. 11.20 in3
 F.C. 0.00 in
 Mud Drop Y 35.0 ft

Amt. of fill 0.00 ft
 Btm. H. Temp. 134.00 F
 Hole Condition good
 % Porosity 0.00
 Packer Size 6.75 in
 No. of Packers 3
 Cushion Amt. 0.00
 Cushion Type
 Reversed Out N
 Tool Chased N
 Tester Shane McBride
 Co. Rep. Craig Caulk
 Contr. L.D.
 Rig # 1
 Unit #
 Pump T.

Test Successful: Y

CALCULATED RECOVERY ANALYSIS

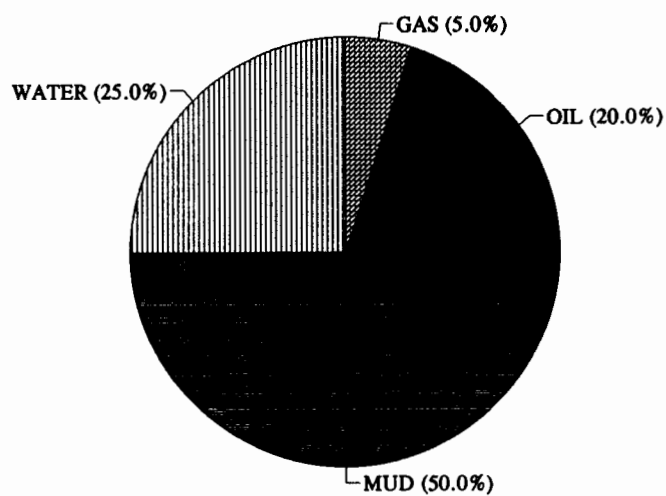
DST 1

TICKET # 8779

SAMPLE #	TOTAL FEET	GAS %	FEET	OIL %	FEET	WATER %	FEET	MUD %	FEET
DRILL PIPE 1	90	5	4.5	20	18	25	22.5	50	45
2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
6			0		0		0		0
WEIGHT PIP 1			0		0		0		0
2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
DRL COLLAR 1			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	90		4.5		18		22.5		45

HRS OPEN BBL/DAY

BBL OIL= 0.25596 * 1.5 4.09536
 BBL WATER= 0.31995 * 5.1192
 BBL MUD= 0.6399
 BBL GAS = 0.06399



8779 DST # 6 Southwest # 1-4 Landmark TEST HISTORY

Flag Points

t (Min.) P (PSig)

A: 0.00 2376.07
 B: 0.00 20.72
 C: 45.00 37.00
 D: 44.00 1070.49
 E: 0.00 39.19
 F: 43.00 52.11
 G: 59.00 1043.80
 Q: 0.00 2291.89

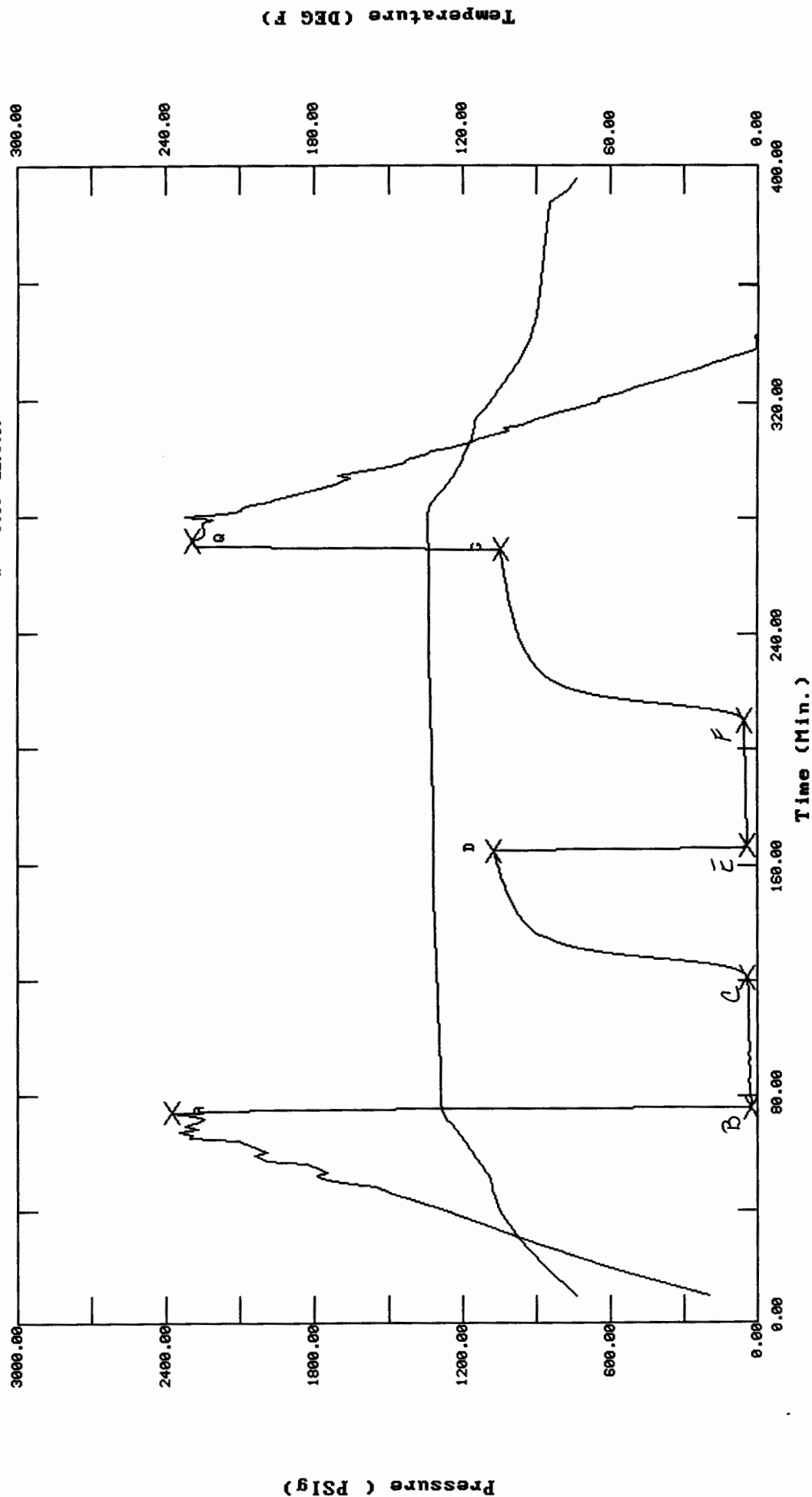
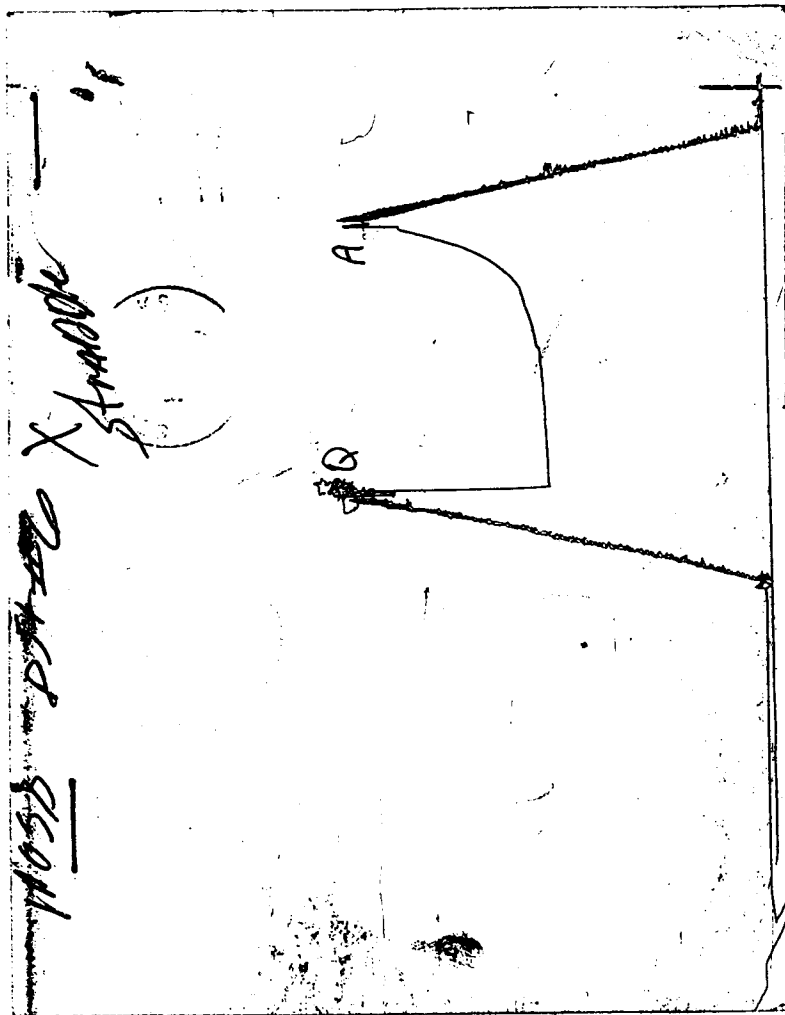


CHART PAGE



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

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8779 DST # 6 Southwest # 1-4 Landmark

DATE: 05/26/96 TIME: 08:12:16

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	74.00	2376.1	0.0	127.83		
***** Start Flow 1	0.00	20.7	0.0	128.48		
	1.00	23.4	2.7	128.66		
	2.00	22.5	1.8	128.75		
	3.00	22.6	1.8	128.79		
	4.00	25.7	5.0	128.82		
	5.00	26.8	6.0	128.83		
	6.00	27.2	6.5	128.85		
	7.00	30.0	9.2	128.87		
	8.00	28.6	7.9	128.89		
	9.00	30.7	10	128.91		
	10.00	26.4	5.7	128.94		
	11.00	27.1	6.4	128.97		
	12.00	27.7	7.0	129.00		
	13.00	27.9	7.2	129.04		
	14.00	28.9	8.1	129.07		
	15.00	34.7	13.9	129.12		
	16.00	28.4	7.7	129.16		
	17.00	28.8	8.1	129.20		
	18.00	35.6	14.9	129.25		
	19.00	30.4	9.7	129.29		
	20.00	29.6	8.9	129.34		
	21.00	29.9	9.1	129.39		
	22.00	30.2	9.5	129.44		
	23.00	30.7	10	129.50		
	24.00	31.0	10.2	129.55		
	25.00	31.4	10.7	129.60		
	26.00	31.5	10.8	129.65		
	27.00	31.9	11.2	129.71		
	28.00	32.1	11.4	129.77		
	29.00	32.6	11.8	129.82		
	30.00	32.6	11.9	129.88		
	31.00	33.0	12.3	129.94		
	32.00	33.3	12.6	130.00		
	33.00	33.6	12.9	130.06		
	34.00	33.9	13.2	130.11		
	35.00	34.1	13.3	130.15		
	36.00	34.6	13.8	130.19		
	37.00	34.9	14.2	130.22		
	38.00	35.2	14.5	130.26		
	39.00	35.5	14.8	130.29		
	40.00	35.7	15.0	130.32		
	41.00	35.9	15.2	130.35		
	42.00	36.3	15.6	130.39		
	43.00	36.7	15.9	130.41		
	44.00	36.8	16.1	130.45		
***** End Flow 1	45.00	37.0	16.3	130.48		
***** Start Shutin 1	0.00	37.0	0.0	130.48	0.0000	0.001
	1.00	45.2	8.2	130.53	46.0000	0.002
	2.00	64.1	27.1	130.57	23.5000	0.004
	3.00	91.8	54.8	130.61	16.0000	0.008

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8779 DST # 6 Southwest # 1-4 Landmark

DATE: 05/26/96 TIME: 08:12:16

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	4.00	136.6	99.6	130.66	12.2500	0.019
	5.00	212.0	175.0	130.71	10.0000	0.045
	6.00	324.5	287.5	130.77	8.5000	0.105
	7.00	453.5	416.4	130.83	7.4286	0.206
	8.00	567.0	530.0	130.90	6.6250	0.321
	9.00	654.9	617.9	130.96	6.0000	0.429
	10.00	720.8	683.8	131.03	5.5000	0.520
	11.00	770.3	733.3	131.10	5.0909	0.593
	12.00	808.7	771.7	131.16	4.7500	0.654
	13.00	839.0	802.0	131.22	4.4615	0.704
	14.00	863.8	826.8	131.27	4.2143	0.746
	15.00	884.3	847.3	131.32	4.0000	0.782
	16.00	901.9	864.9	131.37	3.8125	0.813
	17.00	916.7	879.7	131.42	3.6471	0.840
	18.00	929.7	892.7	131.45	3.5000	0.864
	19.00	941.2	904.2	131.49	3.3684	0.886
	20.00	951.5	914.5	131.53	3.2500	0.905
	21.00	960.8	923.8	131.57	3.1429	0.923
	22.00	969.2	932.2	131.60	3.0455	0.939
	23.00	976.8	939.8	131.63	2.9565	0.954
	24.00	984.0	947.0	131.66	2.8750	0.968
	25.00	990.5	953.5	131.69	2.8000	0.981
	26.00	996.6	959.6	131.72	2.7308	0.993
	27.00	1002.5	965.5	131.75	2.6667	1.005
	28.00	1008.0	971.0	131.77	2.6071	1.016
	29.00	1013.3	976.3	131.79	2.5517	1.027
	30.00	1018.4	981.4	131.82	2.5000	1.037
	31.00	1023.2	986.2	131.85	2.4516	1.047
	32.00	1027.8	990.8	131.87	2.4062	1.056
	33.00	1032.3	995.3	131.89	2.3636	1.066
	34.00	1036.5	999.5	131.91	2.3235	1.074
	35.00	1040.5	1003.5	131.94	2.2857	1.083
	36.00	1044.4	1007.4	131.95	2.2500	1.091
	37.00	1048.2	1011.2	131.97	2.2162	1.099
	38.00	1051.7	1014.7	131.99	2.1842	1.106
	39.00	1055.2	1018.2	132.00	2.1538	1.113
	40.00	1058.4	1021.4	132.03	2.1250	1.120
	41.00	1061.7	1024.7	132.04	2.0976	1.127
	42.00	1064.8	1027.8	131.95	2.0714	1.134
	43.00	1067.6	1030.6	132.08	2.0465	1.140
***** End Shut-in 1	44.00	1070.5	1033.5	132.10	2.0227	1.146
***** Start Flow 2	0.00	39.2	0.0	132.06		
	1.00	38.8	-0.3	132.04		
	2.00	39.7	0.5	132.00		
	3.00	40.4	1.3	131.98		
	4.00	40.9	1.8	131.96		
	5.00	41.2	2.0	131.94		
	6.00	41.6	2.4	131.94		
	7.00	41.9	2.7	131.93		
	8.00	42.2	3.0	131.93		
	9.00	42.6	3.4	131.94		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8779 DST # 6 Southwest # 1-4 Landmark

DATE: 05/26/96 TIME: 08:12:16

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	10.00	43.0	3.8	131.95		
	11.00	43.2	4.0	131.95		
	12.00	43.4	4.2	131.98		
	13.00	43.6	4.4	131.99		
	14.00	43.9	4.7	132.01		
	15.00	44.2	5.0	132.04		
	16.00	44.6	5.4	132.08		
	17.00	44.9	5.7	132.11		
	18.00	45.1	5.9	132.15		
	19.00	45.4	6.2	132.19		
	20.00	45.6	6.5	132.22		
	21.00	46.0	6.8	132.27		
	22.00	46.2	7.0	132.30		
	23.00	46.5	7.3	132.34		
	24.00	46.7	7.5	132.37		
	25.00	47.0	7.8	132.41		
	26.00	47.2	8.1	132.44		
	27.00	47.6	8.4	132.47		
	28.00	47.7	8.6	132.51		
	29.00	48.1	8.9	132.53		
	30.00	48.4	9.2	132.56		
	31.00	48.8	9.6	132.59		
	32.00	49.0	9.8	132.62		
	33.00	49.3	10.1	132.65		
	34.00	49.4	10.2	132.68		
	35.00	49.8	10.6	132.69		
	36.00	50.0	10.8	132.73		
	37.00	50.3	11.2	132.75		
	38.00	50.5	11.3	132.78		
	39.00	50.8	11.6	132.80		
	40.00	51.0	11.8	132.83		
	41.00	51.4	12.2	132.86		
	42.00	51.8	12.6	132.89		
***** End Flow 2	43.00	52.1	12.9	132.91		
***** Start Shutin 2	0.00	52.1	0.0	132.91	0.0000	0.003
	1.00	59.4	7.3	132.94	89.0000	0.004
	2.00	90.1	38.0	132.96	45.0000	0.008
	3.00	136.6	84.5	132.99	30.3333	0.019
	4.00	210.3	158.2	133.02	23.0000	0.044
	5.00	316.1	264.0	133.05	18.6000	0.10
	6.00	436.1	384.0	133.10	15.6667	0.190
	7.00	542.6	490.5	133.19	13.5714	0.294
	8.00	626.1	574.0	133.19	12.0000	0.392
	9.00	688.9	636.8	133.23	10.7778	0.475
	10.00	736.2	684.1	133.26	9.8000	0.542
	11.00	772.8	720.7	133.32	9.0000	0.597
	12.00	801.5	749.4	133.35	8.3333	0.642
	13.00	824.8	772.7	133.39	7.7692	0.680
	14.00	844.2	792.1	133.42	7.2857	0.713
	15.00	860.6	808.5	133.45	6.8667	0.741
	16.00	874.6	822.5	133.48	6.5000	0.765

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8779 DST # 6 Southwest # 1-4 Landmark

DATE: 05/26/96

TIME: 08:12:16

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	17.00	886.8	834.7	133.50	6.1765	0.786
	18.00	897.6	845.5	133.52	5.8889	0.806
	19.00	907.2	855.1	133.54	5.6316	0.823
	20.00	915.8	863.7	133.55	5.4000	0.839
	21.00	923.6	871.5	133.57	5.1905	0.853
	22.00	930.8	878.6	133.59	5.0000	0.866
	23.00	937.4	885.3	133.60	4.8261	0.879
	24.00	943.5	891.4	133.61	4.6667	0.890
	25.00	949.3	897.2	133.62	4.5200	0.901
	26.00	954.5	902.4	133.63	4.3846	0.911
	27.00	959.5	907.3	133.65	4.2593	0.921
	28.00	964.2	912.0	133.65	4.1429	0.930
	29.00	968.6	916.5	133.66	4.0345	0.938
	30.00	972.8	920.7	133.67	3.9333	0.946
	31.00	976.7	924.6	133.68	3.8387	0.954
	32.00	980.3	928.2	133.71	3.7500	0.961
	33.00	983.9	931.8	133.70	3.6667	0.968
	34.00	987.4	935.3	133.71	3.5882	0.975
	35.00	990.8	938.7	133.73	3.5143	0.982
	36.00	993.9	941.8	133.73	3.4444	0.988
	37.00	997.0	944.9	133.73	3.3784	0.994
	38.00	999.8	947.7	133.74	3.3158	1.00
	39.00	1002.7	950.6	133.74	3.2564	1.005
	40.00	1005.4	953.3	133.76	3.2000	1.011
	41.00	1008.0	955.9	133.78	3.1463	1.016
	42.00	1010.6	958.5	133.78	3.0952	1.021
	43.00	1012.9	960.8	133.79	3.0465	1.026
	44.00	1015.2	963.1	133.79	3.0000	1.031
	45.00	1017.4	965.3	133.80	2.9556	1.035
	46.00	1019.7	967.6	133.81	2.9130	1.040
	47.00	1021.9	969.8	133.82	2.8723	1.044
	48.00	1024.0	971.9	133.82	2.8333	1.049
	49.00	1026.3	974.2	133.84	2.7959	1.053
	50.00	1028.4	976.2	133.84	2.7600	1.058
	51.00	1030.3	978.2	133.84	2.7255	1.061
	52.00	1032.1	980.0	133.85	2.6923	1.065
	53.00	1034.0	981.9	133.86	2.6604	1.069
	54.00	1035.8	983.7	133.87	2.6296	1.073
	55.00	1037.4	985.3	133.87	2.6000	1.076
	56.00	1039.1	987.0	133.88	2.5714	1.080
	57.00	1040.9	988.8	133.88	2.5439	1.083
	58.00	1042.3	990.2	133.89	2.5172	1.086
***** End Shut-in 2	59.00	1043.8	991.7	133.90	2.4915	1.090
***** Final Hydro.	272.00	2291.9	0.0	134.07		

*** TOOL DIAGRAM *** CONV STRADDLE

WELL NAME: Southwest 1-4

LOCATION : 4-10S-32W, Thomas Cty KS

TICKET No. 8779 D.S.T. No. 6 DATE 5-25-96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL 21

BOTTOM PACKERS AND ANCHOR 39

TOTAL TOOL 80

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands1 Single Total 62

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 142

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands74 Single 1 Total 4603

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4745

TOTAL DEPTH 4720

TOTAL DRILL PIPE ABOVE K.B. 25

REMARKS:

P.O. SUB	
C.O. SUB 1'	4578
S.I. TOOL 5'	4584
HMV 5'	4589
JARS n/a	
SAFETY JOINT n/a	
PACKER top	4593
PACKER bottom	4598
DEPTH 4598	
STUBB 1'	4599
ANCHOR 9'-perf	4608
1' c.o	4609
alpine recorder	4610
62' collars	4671
1' c.o	4672
5'-perf	4677
1' blank off	4678
T.C.	
DEPTH	
PACKER straddle	4681
1' stubb	4682
1' c.o.	4683
31' drillpipe	4714
1' c.o.	4715
AK-1 recorder	4715
BULLNOSE 5' bullplug	
T.D.	4720

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 8779

Well Name & No.	OHL Southwest 1-4		Test No.	6	Date	5-25-96
Company	Landmark Energy, New Oil Corp.		Zone Tested	BASAL SAND		
Address	1861 N. Rock Road, Suite 205 Wichita, KS 67206		Elevation	3097 KB	3092 GL	
Co. Rep / Geo.	Craig Caulk	Cont.	L.D. Dwyer #1	Est. Ft. of Pay		Por. %
Location: Sec.	4	Twp.	10	Rge.	32	Co. Thomas State KS
No. of Copies	1	Distribution Sheet (Y, N)		Turnkey (Y, N)	1	Evaluation (Y, N)

Interval Tested 4598' - 4681' Initial Str Wt./Lbs. 8200 Unseated Str Wt./Lbs. 53000
 Anchor Length 83' Wt. Set Lbs. 30000 Wt. Pulled Loose/Lbs. 82000
 Top Packer Depth 4593' Hole Size — 7 7/8" ☒ Rubber Size — 6 3/4" ☒
 Bottom Packer Depth 4598-Top 4681-straddle Wt. Pipe I.D. — 2.7 Ft. Run —
 Total Depth 4720 Drill Collar — 2.25 Ft. Run 62'
 Mud Wt. 9.3 LCM True Vis. 48 WL 4.2 Drill Pipe Size 4 1/2 XH Ft. Run 4634'
 Blow Description Surface blow built to 3" in.

I.S.F. No return
F.F. ~~1 1/4" in.~~ Surface blow built to 1 3/4" in.
I.S.F. No return

Recovery — Total Feet	90'	Ft. in DC	—	Ft. in WP	—	Ft. in DP	90'
Rec.	90'	Feet Of	Sl. Hy Gas 0.1 cut under mud	5% gas	20% oil	25% water	50% mud
Rec.		Feet Of		% gas	% oil	% water	% mud
Rec.		Feet Of		% gas	% oil	% water	% mud
Rec.		Feet Of		% gas	% oil	% water	% mud
Rec.	450'	Feet Of	625 TA Pipe	% gas	% oil	% water	% mud

BHT 134° °F Gravity — °API D@ — °F Corrected Gravity — °API

RW 36 @ 60 °F Chlorides 21200 ppm Recovery Chlorides 2000 ppm System

(A) Initial Hydrostatic Mud	2376	PSI	Recorder No.	2342	T-Started	20:11 P.M.
(B) First Initial Flow Pressure	20	PSI	@ (depth)	4610'	T-Open	21:25 P.M.
(C) First Final Flow Pressure	37	PSI	Recorder No.	11058	T-Pulled	12:40 AM.
(D) Initial Shut-in Pressure	1070	PSI	@ (depth)	4715'	T-Out	3:15 AM
(E) Second Initial Flow Pressure	38	PSI	Recorder No.			
(F) Second Final Flow Pressure	52	PSI	@ (depth)			
(G) Final Shut-in Pressure	1043	PSI	Initial Opening	45	Test	X 600
(H) Final Hydrostatic Mud	2291	PSI	Initial Shut-in	45	Jars	

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 [Signature]

Our Representative —

Final Flow 45 Safety Joint —
 Final Shut-in 60 Straddle X 250
450 GIP Circ. Sub X N/C
 Sampler —
 Extra Packer X 150
 Elect. Rec. X 150
 Other —
 TOTAL PRICE \$ 1150

Well name Southwest
DST # 1
Recorder # 13339

A		2127	
B		48	
C		48	
D		48	
E		48	
F		48	
G		48	
H		2119	
0			
1			
2			

Well name Southwest
DST # 2
Recorder # 13339

A		2241	
B		100	
C		100	
D		1082	
E		140	
F		158	
G		1036	
H		2219	
10			
11			
12			

Well name Southwest
DST # 4
Recorder # 13308

1	A	2257
2	B	71
3	C	71
4	D	563
5	E	75
6	F	75
7	G	236
8	H	2250
9		
10		
11		
12		

Well name Southwest
DST # 5
Recorder # 11058

1	A	2332
2	B	83
3	C	710
4	D	111
5	E	82
6	F	93
7	G	1082
8	H	2312
9		
10		
11		
12		

Well name Southwest
DST # 6-Straddle
Recorder # 11058

		Field	
1		^{2.185}	
2	A	2451	2433
3	B		
4	C		
5	D		
6	E		
7	F		
8	G		
9	H	^{2.165} 2429	2386
10			
11			
12			