

15-101-21907



### DIAMOND TESTING

P.O. Box 157  
HOISINGTON, KANSAS 67544  
(620) 653-7550 • (800) 542-7313  
STC 21098.d224

Company Ritchie Exploration, Inc. Lease & Well No. Keavs No. 1

Elevation 2890 KB Formation Lansing/Kansas City "E" Effective Pay -- Ft. Ticket No. 2109

Date 3-9-06 Sec. 20 Twp. 17S Range 30W County Lane State Kansas

Test Approved By Kim B. Shoemaker Diamond Representative Roger D. Friedly

Formation Test No. 1 Interval Tested from 4,005 ft. to 4,027 ft. Total Depth 4,027 ft.

Packer Depth 4,000 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.

Packer Depth 4,005 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.

Depth of Selective Zone Set          ft.

Top Recorder Depth (Inside) 3,991 ft. Recorder Number 21098 Cap. 5,000 psi

Bottom Recorder Depth (Outside) 4,024 ft. Recorder Number 13387 Cap. 4,000 psi

Below Straddle Recorder Depth          ft. Recorder Number          Cap.         psi

Drilling Contractor L. D. Drilling, Inc. - Rig 1 Drill Collar Length -- ft. I.D. -- in.

Mud Type Chemical Viscosity 50 Weight Pipe Length -- ft. I.D. -- in.

Weight 9.1 Water Loss 6.4 cc. Drill Pipe Length 3,978 ft. I.D. 3 1/2 in.

Chlorides 3,000 P.P.M. Test Tool Length 27 ft. Tool Size 3 1/2 - IF in.

Jars: Make Bowen Serial Number Not Run Anchor Length 22 ft. Size 4 1/2 - FH in.

Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 - XH in.

Blow: 1st Open: Weak, 1/2 in., blow increasing. Off bottom of bucket in 13 1/2 mins. Weak, 1/2 in., blow back during shut-in.  
2nd Open: Weak, surface blow increasing. Off bottom of bucket in 22 mins. Weak, surface blow back during shut-in.

Recovered 90 ft. of gas in pipe

Recovered 320 ft. of clean oil = 3.283200 bbls. (Gravity: 31 @ 60°)

Recovered 41 ft. of slightly watery & gas cut oily mud = .420660 bbls. (Grind out: 8%-water; 8%-gas; 28%-oil; 56%-mud)

Recovered 31 ft. of slightly oil cut muddy water = .318060 bbls. (Grind out: 5%-oil; 30%-mud; 65%-water)

Recovered 392 ft. of TOTAL FLUID = 4.021920 bbls.

Remarks Tool Sample Grind Out: 6%-mud; 14%-water; 80%-oil

Time Set Packer(s) 9:56 ~~P.M.~~ <sup>XX</sup> Time Started Off Bottom 12:56 ~~P.M.~~ <sup>A.M.</sup> Maximum Temperature 118°

Initial Hydrostatic Pressure ..... (A) 1903 P.S.I.

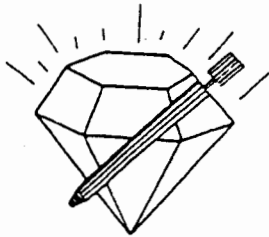
Initial Flow Period ..... Minutes 30 (B) 9 P.S.I. to (C) 78 P.S.I.

Initial Closed In Period ..... Minutes 45 (D) 927 P.S.I.

Final Flow Period ..... Minutes 45 (E) 82 P.S.I. to (F) 157 P.S.I.

Final Closed In Period ..... Minutes 60 (G) 871 P.S.I.

Final Hydrostatic Pressure ..... (H) 1903 P.S.I.



**DIAMOND TESTING**  
P. O. Box 157  
HOISINGTON, KANSAS 67544  
(800) 542-7313

**FLUID SAMPLE DATA**

Company Ritchie Exploration, Inc.  
Lease & Well No. Keavs No. 1  
Date 3-9-06 Sec. 20 Twp. 17 S Range 30 W  
Formation Test No. 1 Interval Tested From 4,005 ft. to 4,027 ft. Total Depth 4,027 ft.  
Formation Lansing/Kansas City "E"

	<u>MUD PIT</u>	<u>RECOVERY</u>	
Viscosity	<u>50</u> CP	<u>--</u> CP	
Weight	<u>9.1</u>	<u>--</u>	
Water Loss	<u>6.4</u> CC	<u>--</u> CC	
PH Factor	<u>10.5</u>	<u>--</u>	<u>Water</u> <u>7.5</u>

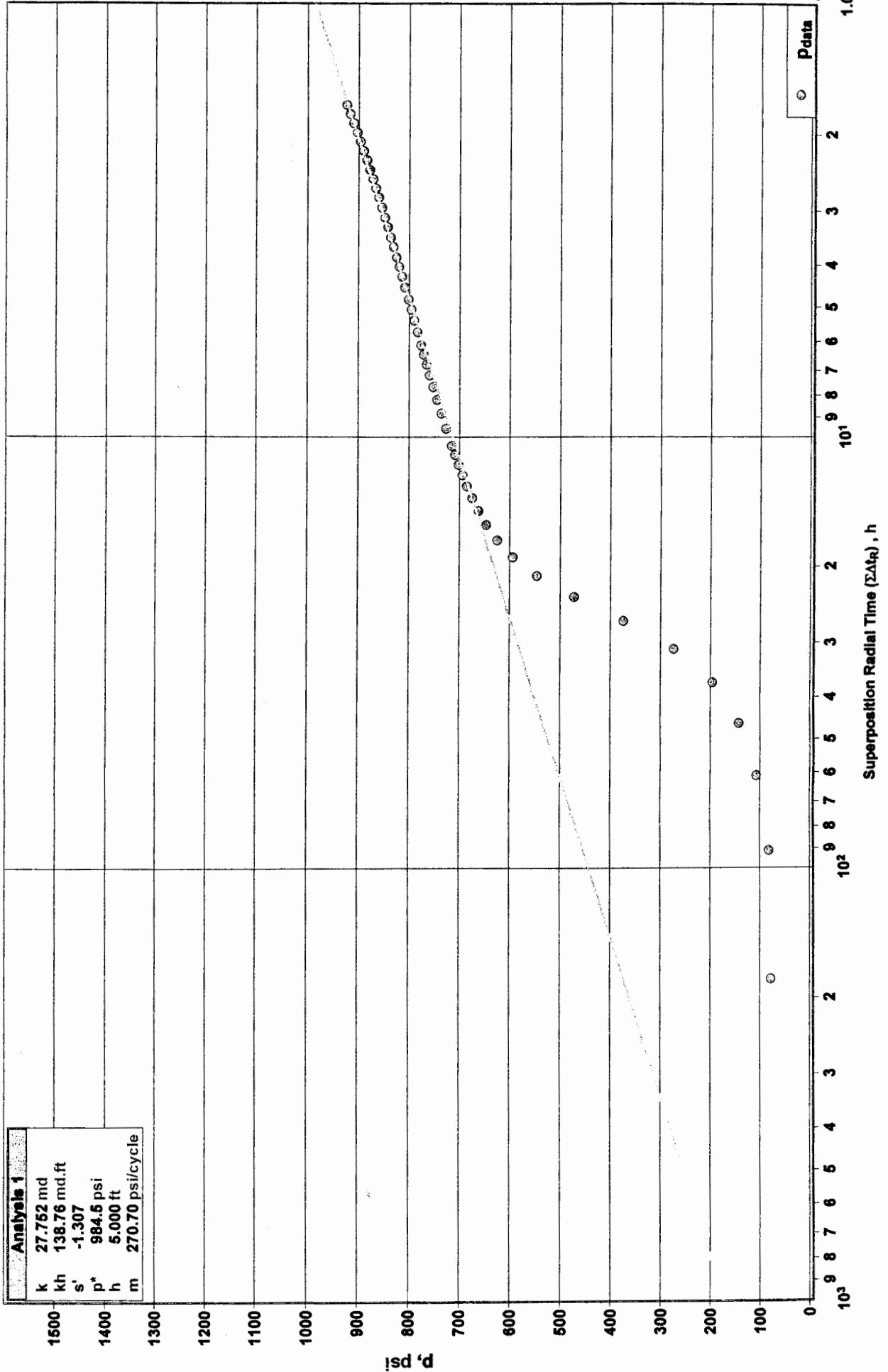
	<u>RESISTIVITY</u>	<u>CHLORIDE</u> <u>CONTENT</u>
Recovery Water	<u>.29 @ 76 °F.</u>	<u>20,000</u> ppm
Recovery Mud	<u>-- @ -- °F.</u>	<u>--</u> ppm
Recovery Mud Filtrate	<u>-- @ -- °F.</u>	<u>--</u> ppm
Mud Pit Sample	<u>1.80 @ 70 °F.</u>	<u>3,500</u> ppm
Mud Pit Sample Filtrate	<u>1.50 @ 74 °F.</u>	<u>3,900</u> ppm

Sample Taken By ROGER D. FRIEDLY  
Witness By KIM B. SHOEMAKER  
Remarks Pit filtrate triton dish chlorides were 3,000 Ppm. 10% oil in the system.  
Recovery water dish chlorides were 15,000 Ppm.



RITCHIE EXPLORATION, INC.  
 KEAVS #1 DST #1  
 LKC "E" 4,005'-4,027'

**DST #1 INITIAL SHUT-IN  
 HORNER PLOT**



# Oil Well Test - Buildup

## Radial Flow Analysis

Page 5 of 9 Pages

RITCHIE EXPLORATION, INC.  
KEAVS #1 DST #1

LKC "E" 4,005' - 4,027'

### Analysis Results

Total Sandface Rate ( $q_t B_t$ )	115.201 bbl/d	Apparent Skin ( $s'$ )	-1.307
Semilog Slope (m)	270.70	Skin - Damage	-1.307
Gas Permeability ( $k_G$ )	md	Skin - Inclination	
Oil Permeability ( $k_O$ )	27.752 md	Skin - Partial Penetration	
Water Permeability ( $k_W$ )	md	Pressure Drop Due to Skin ( $\Delta p_D$ )	-307.35 psi
Flow Capacity (kh)	138.758 md.ft	Damage Ratio (DR)	0.862
Total Mobility ( $k/\mu_{L,t}$ )	13.84 md/cp	Flow Efficiency (FE)	1.160
Total Transmissivity( $kh/\mu_{L,t}$ )	69.20 md.ft/cp		

### Reservoir Parameters

Net Pay (h)	5.000 ft
Total Porosity ( $\phi_t$ )	11.00 %
Water Saturation ( $S_W$ )	20.00 %
Oil Saturation ( $S_O$ )	80.00 %
Gas Saturation ( $S_G$ )	0.00 %
Wellbore Radius ( $r_w$ )	0.30 ft
Formation Temperature (T)	120.0 °F
Formation Compressibility ( $c_f$ )	4.674e-6 psi <sup>-1</sup>
Total Compressibility ( $c_t$ )	1.350e-5 psi <sup>-1</sup>

### Pressures

Initial Pressure ( $p_i$ )	1998.40 psi
Extrapolated Pressure ( $p^*$ )	984.52 psi
Final Flowing Pressure ( $p_{wf0}$ )	77.97 psi

### Production and Times

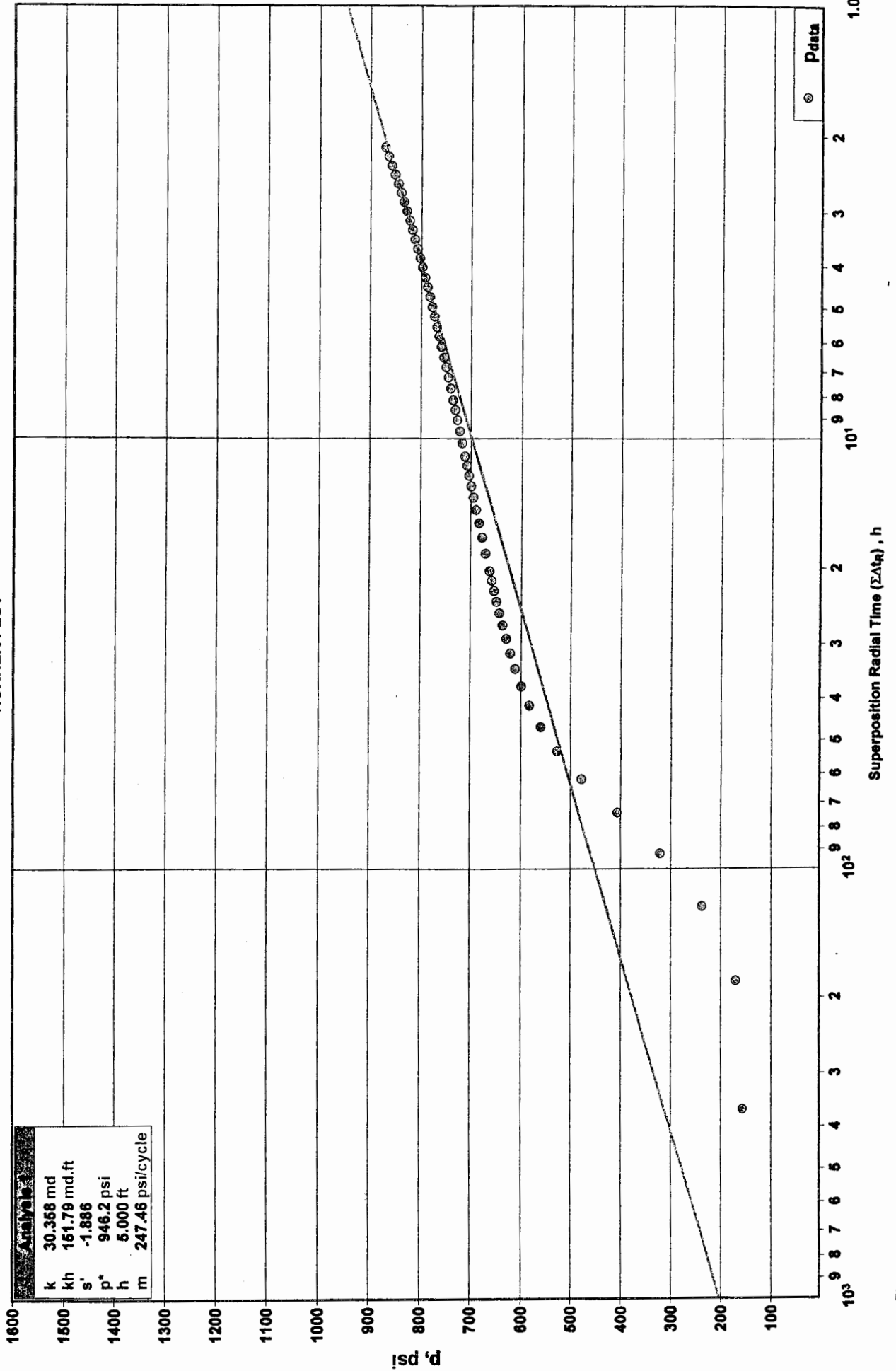
Corrected Flow Time ( $t_c$ )	0.5000 hr
Cumulative Oil Production	2.011 bbl
Final Oil Rate	96.000 bbl/d

### Fluid Properties

Oil Compressibility ( $c_O$ )	1.02917e-5 psi <sup>-1</sup>
Oil Formation Volume Factor ( $B_O$ )	1.200
Oil Viscosity ( $\mu_{L,O}$ )	2.005 cp
Solution Gas Ratio ( $R_S$ )	363 scf/bbl
Oil Gravity ( $\gamma_O$ )	30.00 ° API
Gas Gravity (G)	0.650
PVT Reference Pressure ( $p_{pVT}$ )	1998.40 psi

**RITCHIE EXPLORATION, INC.**  
**KEAVS #1 DST #1**  
**LKC "E" 4,006' - 4,027'**

**DST #1 FINAL SHUT -IN**  
**HORNER PLOT**



# Oil Well Test - Buildup

## Radial Flow Analysis

Page 7 of 9 Pages

RITCHIE EXPLORATION, INC.

LKC "E" 4,005' - 4,027'

KEAVS #1 DST #1

### Analysis Results

Total Sandface Rate ( $q_t B_t$ )	115.201 bbl/d	Apparent Skin ( $s'$ )	-1.886
Semilog Slope (m)	247.46	Skin - Damage	-1.886
Gas Permeability ( $k_g$ )	md	Skin - Inclination	
Oil Permeability ( $k_o$ )	30.358 md	Skin - Partial Penetration	
Water Permeability ( $k_w$ )	md	Pressure Drop Due to Skin ( $\Delta p_s$ )	-405.61 psi
Flow Capacity (kh)	151.791 md.ft -	Damage Ratio (DR)	0.819
Total Mobility ( $k/\mu_{L-L}$ )	15.14 md/cp	Flow Efficiency (FE)	1.220
Total Transmissivity( $kh/\mu_{L-L}$ )	75.70 md.ft/cp		

### Reservoir Parameters

Net Pay (h)	5.000 ft
Total Porosity ( $\phi_t$ )	11.00 %
Water Saturation ( $S_w$ )	20.00 %
Oil Saturation ( $S_o$ )	80.00 %
Gas Saturation ( $S_g$ )	0.00 %
Wellbore Radius ( $r_w$ )	0.30 ft
Formation Temperature (T)	120.0 °F
Formation Compressibility ( $c_f$ )	4.674e-6 psi <sup>-1</sup>
Total Compressibility ( $c_t$ )	1.350e-5 psi <sup>-1</sup>

### Pressures

Initial Pressure ( $p_i$ )	1998.40 psi
Extrapolated Pressure ( $p^*$ )	946.22 psi
Final Flowing Pressure ( $p_{wfo}$ )	156.95 psi

### Production and Times

Corrected Flow Time ( $t_c$ )	1.2583 hr
Cumulative Oil Production	5.044 bbl
Final Oil Rate	96.000 bbl/d

### Fluid Properties

Oil Compressibility ( $c_o$ )	1.02917e-5 psi <sup>-1</sup>
Oil Formation Volume Factor ( $B_o$ )	1.200
Oil Viscosity ( $\mu_{L-O}$ )	2.005 cp
Solution Gas Ratio ( $R_s$ )	363 scf/bbl
Oil Gravity ( $\gamma_o$ )	30.00 ° API
Gas Gravity (G)	0.650
PVT Reference Pressure ( $pp_{VT}$ )	1998.40 psi

RITCHIE EXPLORATION, INC.

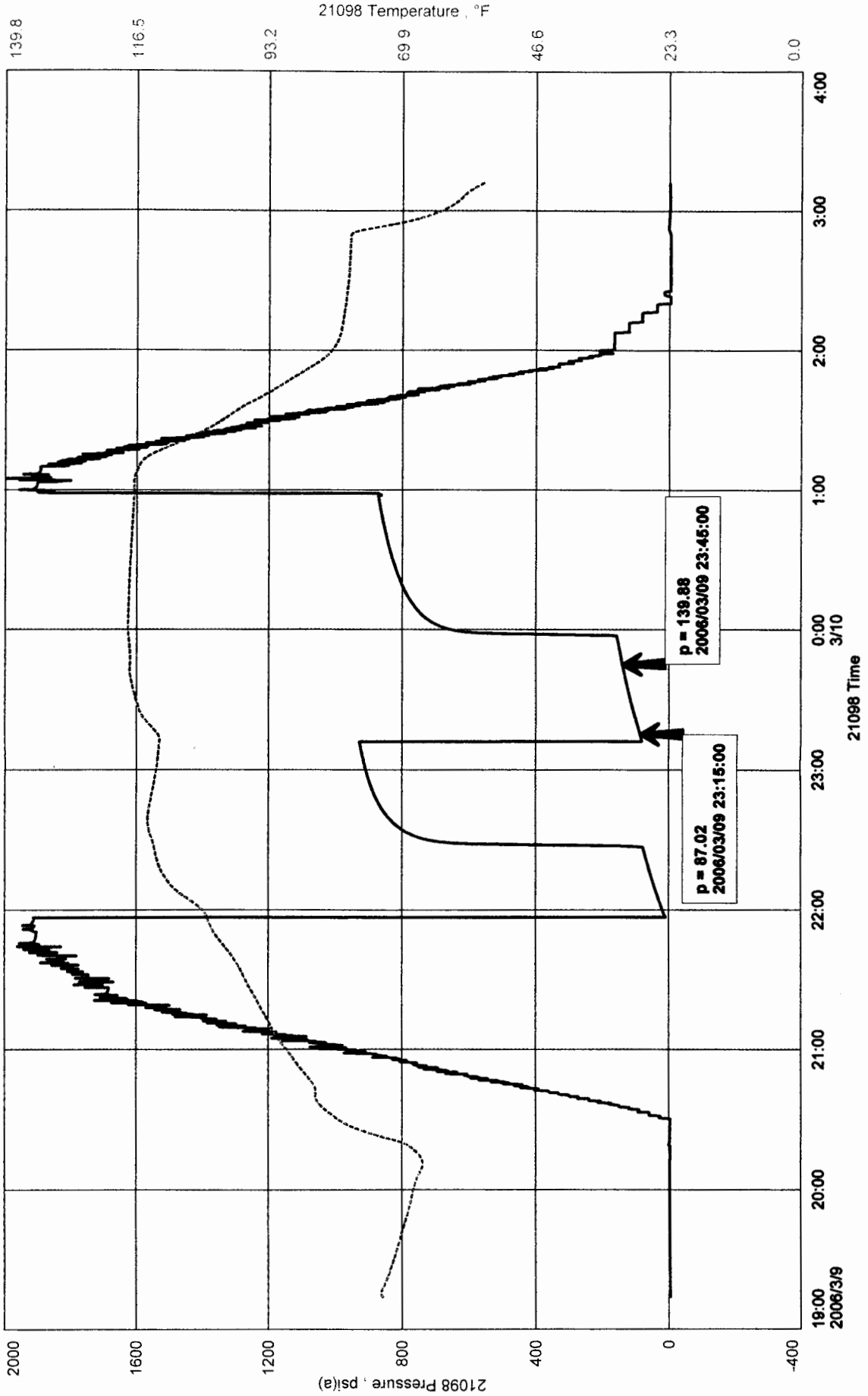
DESCRIPTION	SECOND	FIRST	PRESSURE	PIPE	FLUID	TIME	TOTAL	DAILY	AVERAGE
FINAL FLOW	READING	READING	CHANGE	SIZE-ID	GRADIENT	CHANGE	TIME	PROD.	% OIL
	140	87	53	0.0142	0.3771	30	1440	96	1
									PRODUCTION
									96

KEAVS #1 DST #1 LKC "E" 4,005' - 4,027'

RITCHIE EXPLORATION, INC.  
DST #1 LKC "E" 4,005' - 4,027'  
Start Test Date: 2006/03/09  
Final Test Date: 2006/03/10

KEAVS #1  
Formation: DST #1 LKC "E" 4,005' - 4,027'  
Pool: WILDCAT

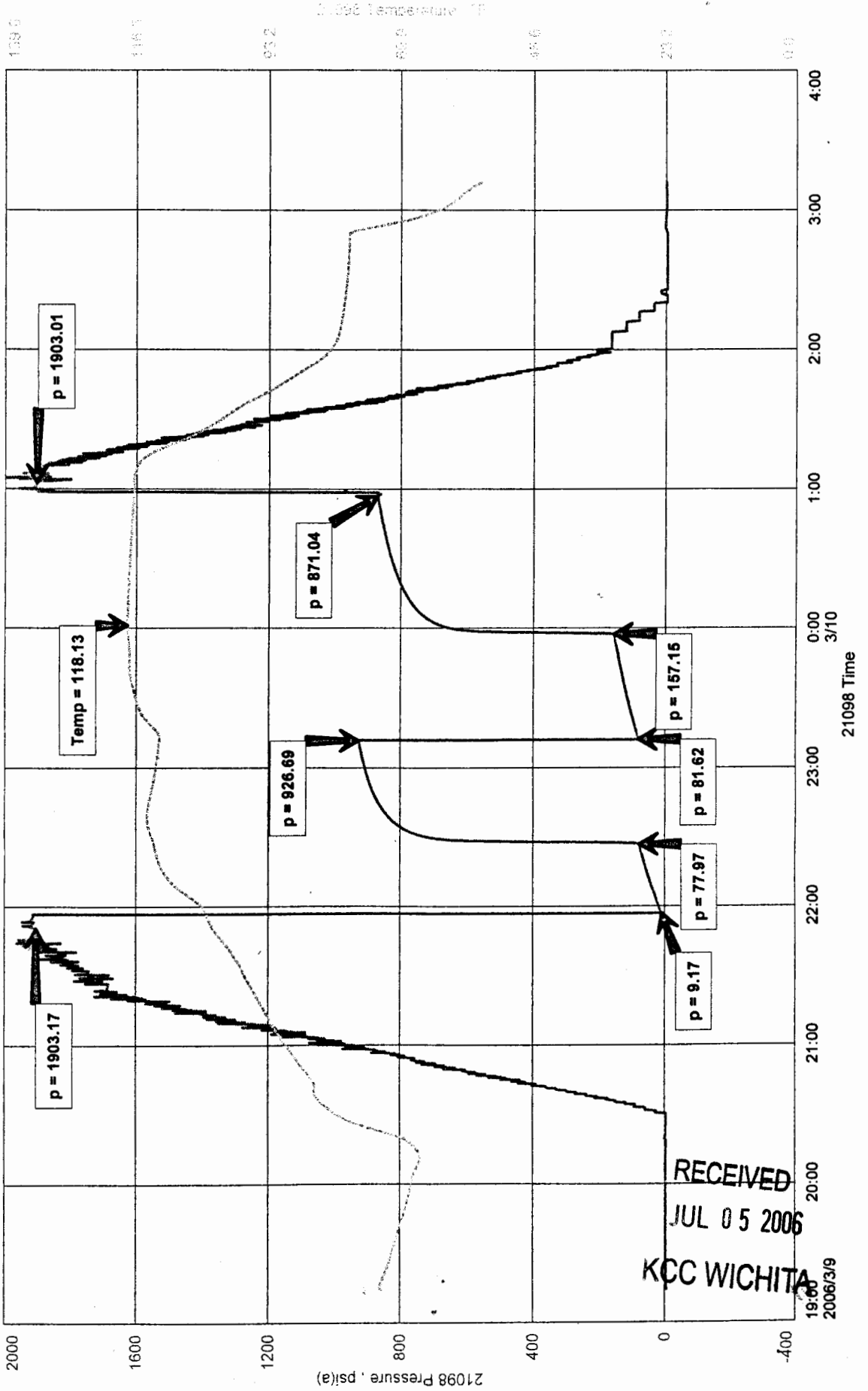
# KEAVS #1 DST #1 EST PROD. CHART



KEAVS #1  
 Formation: DST #1 LKC "E" 4,005' - 4,027'  
 Pool: WILDCAT

RITCHIE EXPLORATION, INC.  
 DST #1 LKC "E" 4,005' - 4,027'  
 Start Test Date: 2006/03/09  
 Final Test Date: 2006/03/10

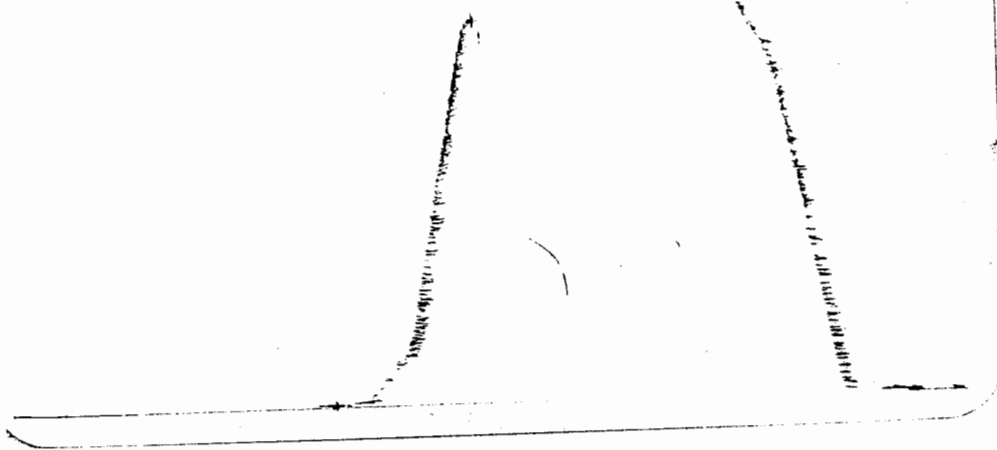
# KEAVS #1



RECEIVED  
 JUL 05 2006  
 KCC WICHITA

DST # V OUTSIDE 13387  
 WKC LF

4005-14827  
 LOC 4024



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Elec. Office Reading	
(A) Initial Hydrostatic Mud .....	1903	1903	PSI
(B) First Initial Flow Pressure .....	9	9	PSI
(C) First Final Flow Pressure .....	78	78	PSI
(D) Initial Closed-in Pressure .....	927	927	PSI
(E) Second Initial Flow Pressure .....	82	82	PSI
(F) Second Final Flow Pressure .....	157	157	PSI
(G) Final Closed-in Pressure .....	871	871	PSI
(H) Final Hydrostatic Mud .....	1903	1903	PSI



# DIAMOND TESTING

P.O. Box 157  
HOISINGTON, KANSAS 67544  
(620) 653-7550 • (800) 542-7313  
STC 21098.d225

Company Ritchie Exploration, Inc. Lease & Well No. Keavs No. 1

Elevation 2890 KB Formation Marmaton/Altamont Effective Pay      Ft. Ticket No. 2110

Date 3-11-06 Sec. 20 Twp. 17S Range 30W County Lane State Kansas

Test Approved By Kim B. Shoemaker Diamond Representative Roger D. Friedly

Formation Test No. 2 Interval Tested from 4,308 ft. to 4,370 ft. Total Depth 4,370 ft.

Packer Depth 4,303 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.

Packer Depth 4,308 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.

Depth of Selective Zone Set      ft.

Top Recorder Depth (Inside) 4,294 ft. Recorder Number 21098 Cap. 5,000 psi

Bottom Recorder Depth (Outside) 4,367 ft. Recorder Number 13387 Cap. 4,000 psi

Below Straddle Recorder Depth      ft. Recorder Number      Cap.      psi

Drilling Contractor L. D. Drilling, Inc. - Rig 1 Drill Collar Length      ft. I.D.      in.

Mud Type Chemical Viscosity 55 Weight Pipe Length      ft. I.D.      in.

Weight 9.2 Water Loss 6.0 cc. Drill Pipe Length 4,281 ft. I.D. 3 1/2 in.

Chlorides 2,700 P.P.M. Test Tool Length 27 ft. Tool Size 3 1/2 - IF in.

Jars: Make Bowen Serial Number Not Run Anchor Length 31' perf. w/31' drill pipe Size 4 1/2 - FH in.

Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 - XH in.

Blow: \* 1st Open: Weak, 1/8 in., blow increasing to 4 1/2 ins. No blow back during shut-in.

2nd Open: Weak, surface blow increasing to 6 1/2 ins. No blow back during shut-in.

Recovered 598 ft. of system drilling mud = 6.135480 bbls. (Grind out: 8%-oil; 92%-mud from tool sliding)

Recovered 124 ft. of slightly oil cut watery mud = 1.272240 bbls. (Grind out: 1%-oil; 31%-water; 68%-mud)

Recovered 722 ft. of TOTAL FLUID = 7.407720 bbls.

Recovered      ft. of     

Recovered      ft. of     

Remarks Tool Sample Grind Out: 2%-oil; 6%-water; 92%-mud

\* Tool slid 10 ft. Opened while head joint added. Lost mud.

Time Set Packer(s) 12:07 ~~XXM.~~ P.M. Time Started Off Bottom 3:07 ~~XXM.~~ P.M. Maximum Temperature 117 °

Initial Hydrostatic Pressure ..... (A) 2063 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 371 P.S.I. to (C) 395 P.S.I.

Initial Closed In Period ..... Minutes 45 (D) 981 P.S.I.

Final Flow Period ..... Minutes 45 (E) 394 P.S.I. to (F) 426 P.S.I.

Final Closed In Period ..... Minutes 60 (G) 978 P.S.I.

Final Hydrostatic Pressure ..... (H) 2061 P.S.I.



**DIAMOND TESTING**  
P. O. Box 157  
HOISINGTON, KANSAS 67544  
(800) 542-7313

**FLUID SAMPLE DATA**

Company Ritchie Exploration, Inc.

Lease & Well No. Keavs No. 1

Date 3-11-06 Sec. 20 Twp. 17 S Range 30 W

Formation Test No. 2 Interval Tested From 4,308 ft. to 4,370 ft. Total Depth 4,370 ft.

Formation Marmaton/Altamont

	<u>MUD PIT</u>	<u>RECOVERY</u>	
Viscosity	<u>55</u> CP	<u>56</u> CP	
Weight	<u>9.2</u>	<u>9.1</u>	
Water Loss	<u>6.0</u> CC	<u>7.6</u> CC	
PH Factor	<u>10.5</u>	<u>10.5</u>	<u>Water</u> <u>8.5</u>

	<u>RESISTIVITY</u>	<u>CHLORIDE</u> <u>CONTENT</u>
Recovery Water	<u>.46</u> @ <u>62</u> °F.	<u>16,000</u> ppm
Recovery Mud	<u>1.50</u> @ <u>64</u> °F.	<u>4,600</u> ppm
Recovery Mud Filtrate	<u>1.40</u> @ <u>62</u> °F.	<u>5,000</u> ppm
Mud Pit Sample	<u>1.60</u> @ <u>70</u> °F.	<u>3,900</u> ppm
Mud Pit Sample Filtrate	<u>1.90</u> @ <u>76</u> °F.	<u>3,000</u> ppm

Sample Taken By ROGER D. FRIEDLY

Witness By KIM B. SHOEMAKER

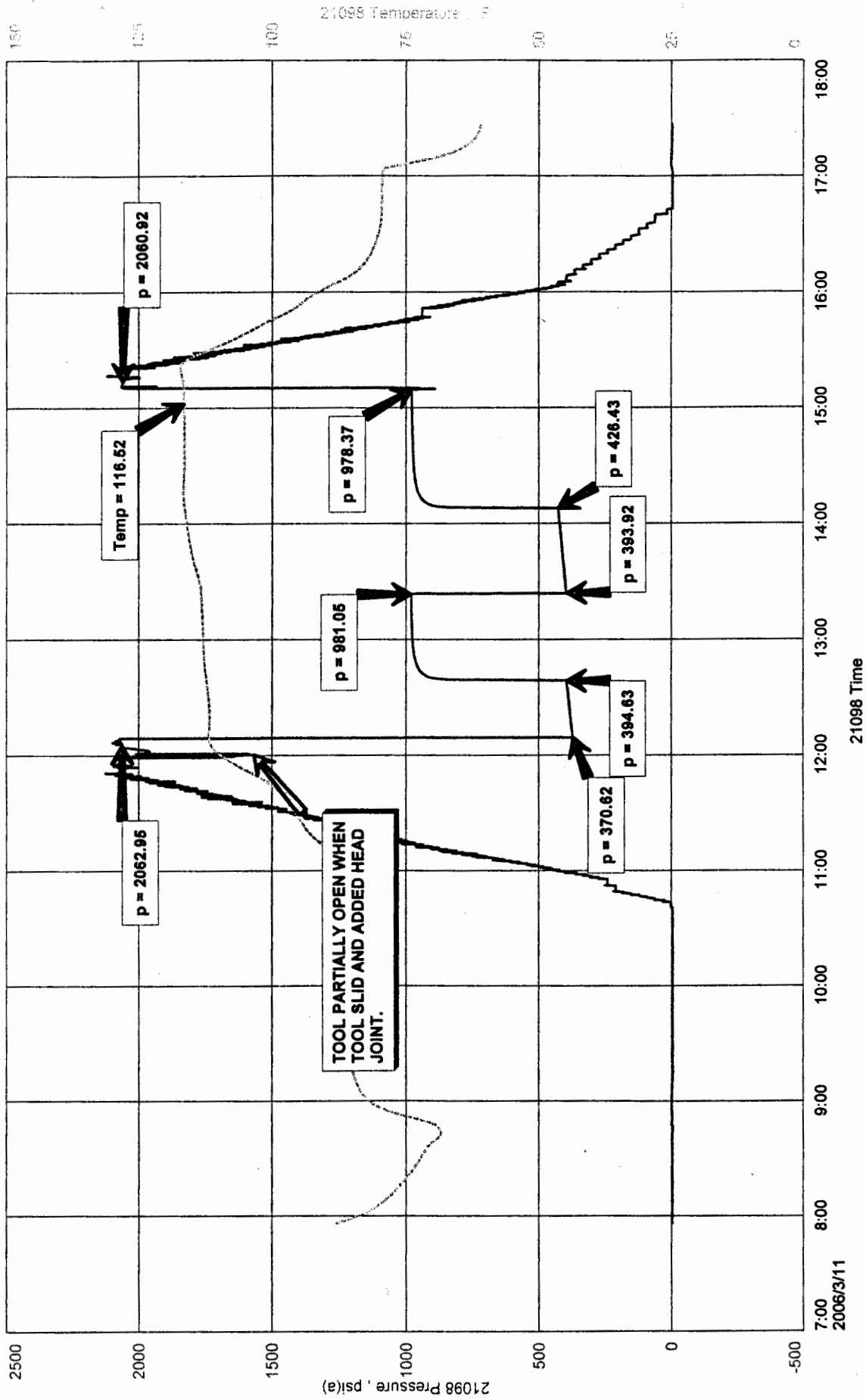
Remarks Pit filtrate triton dish chlorides were 2,700 Ppm.  
Recovery filtrate triton dish chlorides were 3,000 Ppm.  
Recovery water dish chlorides were 13,000 Ppm.

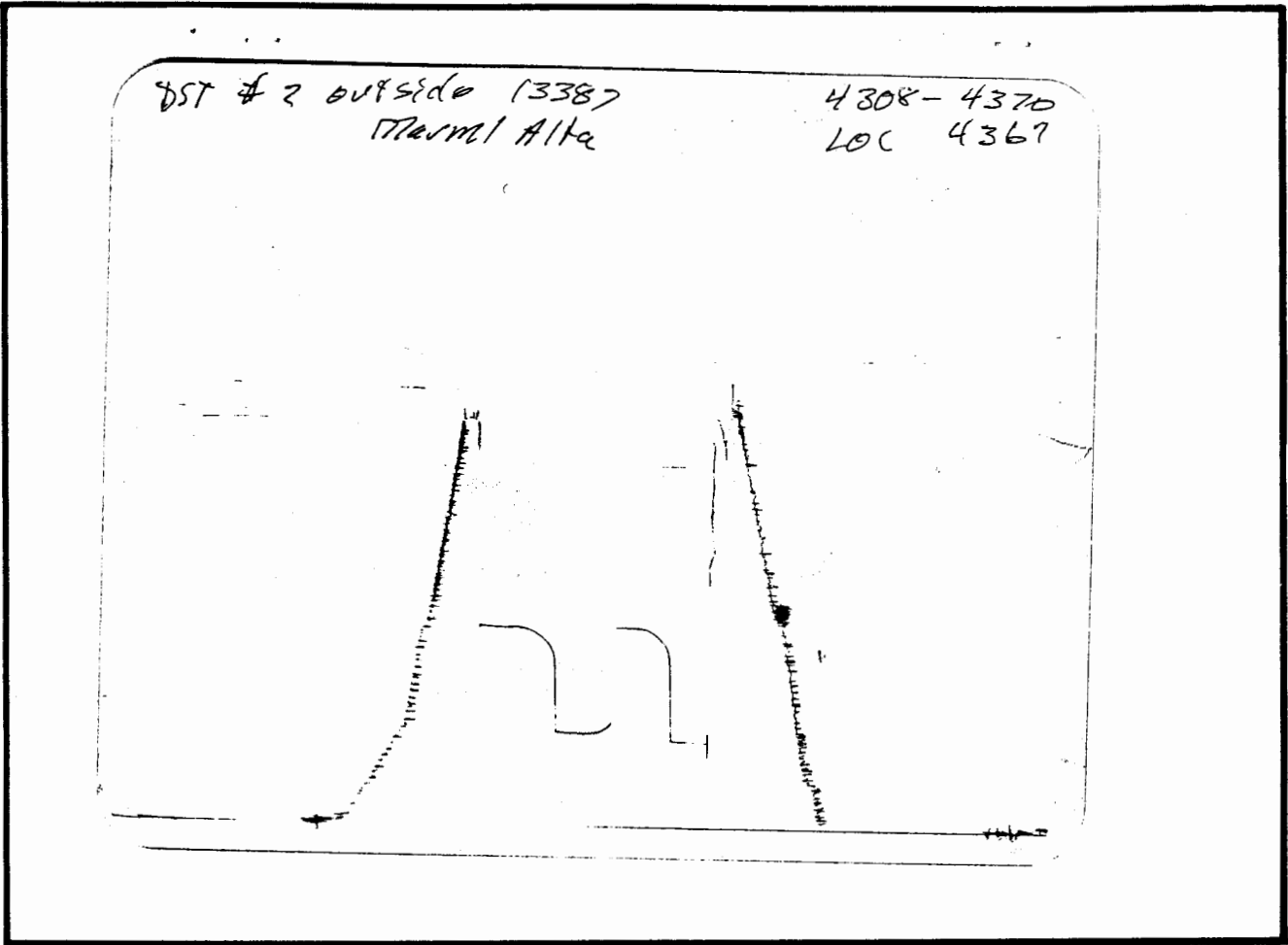


KEAVS #1  
 Formation: DST #2 MARM/ALTAM 4,308' - 4,307'  
 Pool: WILDCAT

RITCHIE EXPLORATION, INC.  
 DST #2 MARM/ALTAM 4,308' - 4,370'  
 Start Test Date: 2006/03/11  
 Final Test Date: 2006/03/11

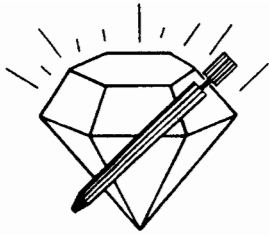
# KEAVS #1





This is an actual photograph of recorder chart.

POINT	PRESSURE		Elec. Office Reading	PSI
	Field Reading	Office Reading		
(A) Initial Hydrostatic Mud .....	2063	2063		PSI
(B) First Initial Flow Pressure.....	371	371		PSI
(C) First Final Flow Pressure .....	395	395		PSI
(D) Initial Closed-in Pressure .....	981	981		PSI
(E) Second Initial Flow Pressure.....	394	394		PSI
(F) Second Final Flow Pressure.....	426	426		PSI
(G) Final Closed-in Pressure.....	978	978		PSI
(H) Final Hydrostatic Mud.....	2061	2061		PSI



# DIAMOND TESTING

P.O. Box 157  
HOISINGTON, KANSAS 67544  
(620) 653-7550 • (800) 542-7313  
STC 21098.d226

Company Ritchie Exploration, Inc. Lease & Well No. Keavs No. 1

Elevation 2890 KB Formation Myrick Station/Fort Scott Effective Pay -- Ft. Ticket No. 2111

Date 3-12-06 Sec. 20 Twp. 17S Range 30W County Lane State Kansas

Test Approved By Kim B. Shoemaker Diamond Representative Roger D. Friedly

Formation Test No. 3 Interval Tested from 4,431 ft. to 4,485 ft. Total Depth 4,485 ft.

Packer Depth 4,426 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.

Packer Depth 4,431 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.

Depth of Selective Zone Set ft.

Top Recorder Depth (Inside) 4,417 ft. Recorder Number 21098 Cap. 5,000 psi

Bottom Recorder Depth (Outside) 4,482 ft. Recorder Number 13387 Cap. 4,000 psi

Below Straddle Recorder Depth ft. Recorder Number psi

Drilling Contractor L. D. Drilling, Inc. - Rig 1 Drill Collar Length -- ft. I.D. -- in.

Mud Type Chemical Viscosity 50 Weight Pipe Length -- ft. I.D. -- in.

Weight 9.3 Water Loss 7.2 cc. Drill Pipe Length 4,404 ft. I.D. 3 1/2 in.

Chlorides 5,000 P.P.M. Test Tool Length 27 ft. Tool Size 3 1/2 - IF in.

Jars: Make Bowen Serial Number Not Run Anchor Length 23' perf. w/31' drill pipe Size 4 1/2 - FH in.

Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 - XH in.

Blow: 1st Open: Weak, 1/8 in., blow increasing to 3 ins. No blow back during shut-in.

2nd Open: Weak, surface blow increasing to 2 ins. No blow back during shut-in.

Recovered 55 ft. of slightly oil cut drilling mud = .564300 bbls. (Grind out: 10%-oil; 90%-mud) System mud 8% oil cut

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks Tool Sample Grind Out: 12%-oil; 88%-mud

Time Set Packer(s) 1:09 P.M. Time Started Off Bottom 3:09 P.M. Maximum Temperature 116°

Initial Hydrostatic Pressure (A) 2141 P.S.I.

Initial Flow Period Minutes 30 (B) 5 P.S.I. to (C) 25 P.S.I.

Initial Closed In Period Minutes 30 (D) 1049 P.S.I.

Final Flow Period Minutes 30 (E) 18 P.S.I. to (F) 32 P.S.I.

Final Closed In Period Minutes 30 (G) 1004 P.S.I.

Final Hydrostatic Pressure (H) 2142 P.S.I.



**DIAMOND TESTING**  
P. O. Box 157  
HOISINGTON, KANSAS 67544  
(800) 542-7313

**FLUID SAMPLE DATA**

Company Ritchie Exploration, Inc.  
Lease & Well No. Keavs No. 1  
Date 3-12-06 Sec. 20 Twp. 17 S Range 30 W  
Formation Test No. 3 Interval Tested From 4,431 ft. to 4,485 ft. Total Depth 4,485 ft.  
Formation Myrick Station/Fort Scott

	<u>MUD PIT</u>	<u>RECOVERY</u>
Viscosity	<u>50</u> CP	<u>48</u> CP
Weight	<u>9.3</u>	<u>9.4</u>
Water Loss	<u>7.2</u> CC	<u>6.8</u> CC
PH Factor	<u>10.0</u>	<u>9.5</u>

	<u>RESISTIVITY</u>	<u>CHLORIDE CONTENT</u>
Recovery Water	<u>--</u> @ <u>--</u> °F.	<u>--</u> ppm
Recovery Mud	<u>1.00</u> @ <u>68</u> °F.	<u>6,400</u> ppm
Recovery Mud Filtrate	<u>1.10</u> @ <u>72</u> °F.	<u>5,800</u> ppm
Mud Pit Sample	<u>.94</u> @ <u>70</u> °F.	<u>6,800</u> ppm
Mud Pit Sample Filtrate	<u>1.00</u> @ <u>74</u> °F.	<u>6,000</u> ppm

Sample Taken By ROGER D. FRIEDLY  
Witness By KIM B. SHOEMAKER

Remarks Pit filtrate triton dish chlorides were 5,000 Ppm.  
Recovery filtrate triton dish chlorides were 5,300 Ppm.

## GENERAL INFORMATION

### Client Information:

Company: RITCHIE EXPLORATION, INC.

Contact: CRAIG CAULK

Phone: Fax: e-mail:

### Site Information:

Contact: KIM SHOEMAKER

Phone: Fax: e-mail:

### Well Information:

Name: KEAVS #1

Operator: RITCHIE EXPLORATION, INC.

Location-Downhole: DST #3 MYRICK ST. / FT. SCOTT 4,431' - 4,485'

Location-Surface: SEC 20-17S-30W LANE COUNTY

### Test Information:

Company: DIAMOND TESTING

Representative: ROGER D. FRIEDLY

Supervisor: KIM SHOEMAKER

Test Type: CONVENTIONAL Job Number:

Test Unit: NO. 1

Start Date: 2006/03/12 Start Time: 10:59:00

End Date: 2006/03/12 End Time: 16:58:00

Report Date: Prepared By:

Remarks: Qualified By:

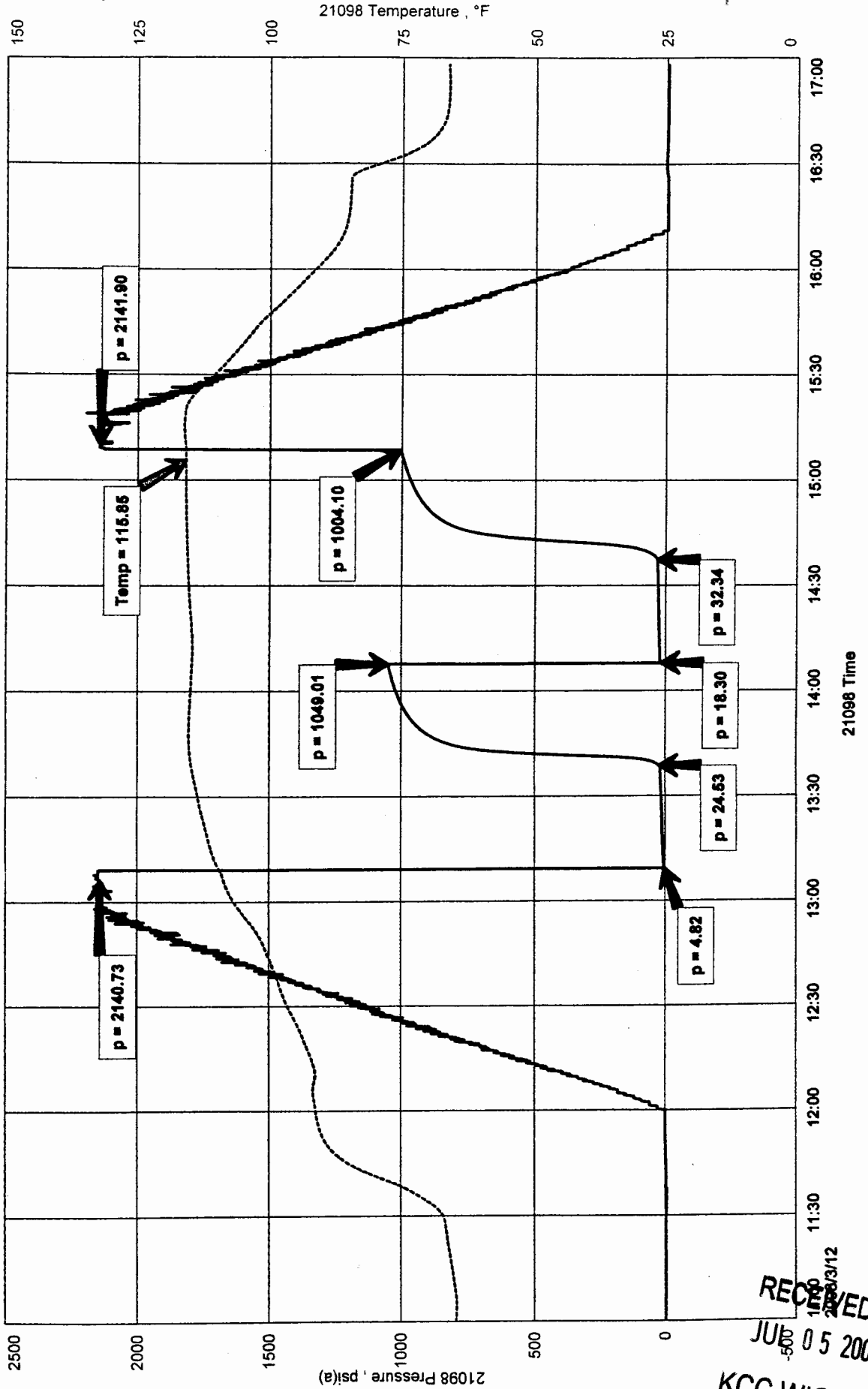
RECOVERED: 55' SLT OCDM 10% OIL, 90% MUD. SYSTEM MUD 8% OIL CUT

TOOL SAMPLE: 12% OIL, 88% MUD.

KEAVS #1  
 Formation: DST #3 MYRICK ST. / FT. SCOTT 4,431' - 4,485'  
 Pool: WILDCAT

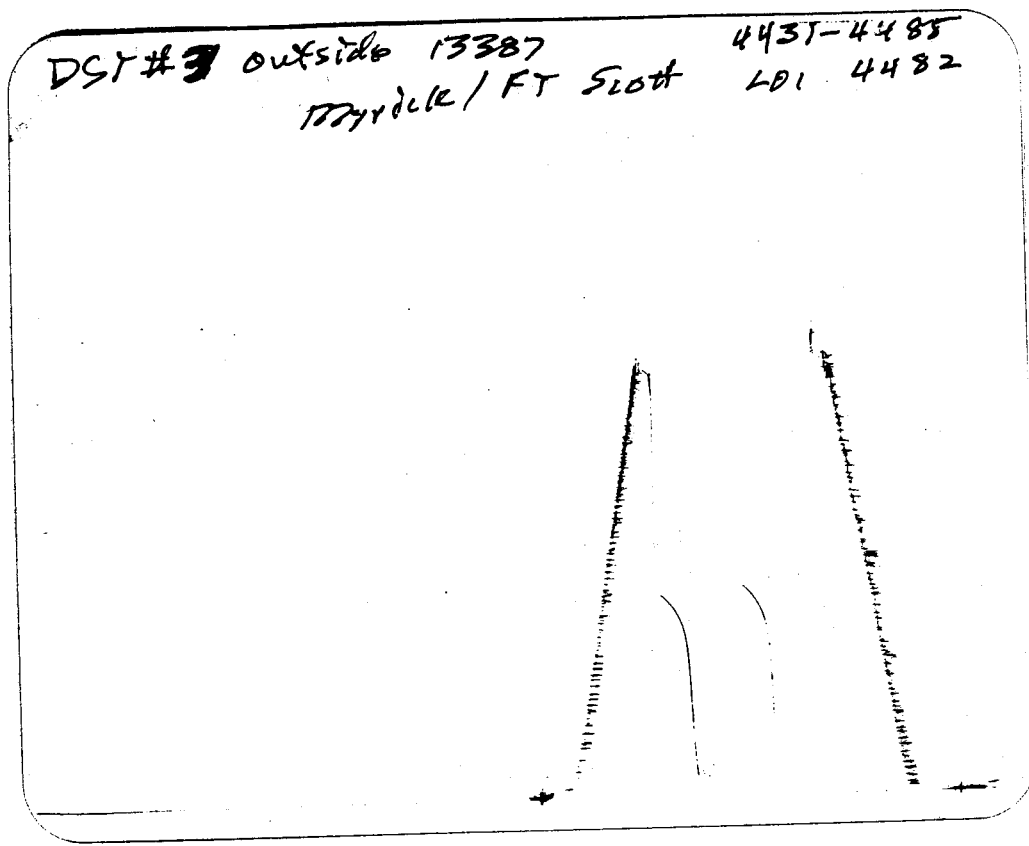
RITCHIE EXPLORATION, INC.  
 DST #3 MYRICK ST. / FT. SCOTT 4,431' - 4,485'  
 Start Test Date: 2006/03/12  
 Final Test Date: 2006/03/12

# KEAVS #1



RECEIVED  
 JUN 05 2006  
 KCC WICHITA

DST # 3 outside 13387  
 Middle / FT Slot  
 4431-4485  
 LDI 4482



This is an actual photograph of recorder chart.

POINT	PRESSURE Elec.		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud .....	2141	2141	PSI
(B) First Initial Flow Pressure .....	5	5	PSI
(C) First Final Flow Pressure .....	25	25	PSI
(D) Initial Closed-in Pressure .....	1049	1049	PSI
(E) Second Initial Flow Pressure .....	18	18	PSI
(F) Second Final Flow Pressure .....	32	32	PSI
(G) Final Closed-in Pressure .....	1004	1004	PSI
(H) Final Hydrostatic Mud .....	2142	2142	PSI



# DIAMOND TESTING

P.O. Box 157  
HOISINGTON, KANSAS 67544  
(620) 653-7550 • (800) 542-7313  
STC 21098.d227

Company Ritchie Exploration, Inc. Lease & Well No. Keavs No. 1

Elevation 2890 KB Formation Cherokee/Johnson Effective Pay      Ft. Ticket No. 2112

Date 3-13-06 Sec. 20 Twp. 17S Range 30W County Lane State Kansas

Test Approved By Kim B. Shoemaker Diamond Representative Roger D. Friedly

Formation Test No. 4 Interval Tested from 4,483 ft. to 4,545 ft. Total Depth 4,545 ft.

Packer Depth 4,478 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.

Packer Depth 4,483 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.

Depth of Selective Zone Set      ft.

Top Recorder Depth (Inside) 4,469 ft. Recorder Number 21098 Cap. 5,000 psi

Bottom Recorder Depth (Outside) 4,542 ft. Recorder Number 13387 Cap. 4,000 psi

Below Straddle Recorder Depth      ft. Recorder Number      Cap.      psi

Drilling Contractor L. D. Drilling, Inc. - Rig 1 Drill Collar Length      ft. I.D.      in.

Mud Type Chemical Viscosity 50 Weight Pipe Length      ft. I.D.      in.

Weight 9.3 Water Loss 7.2 cc. Drill Pipe Length 4,456 ft. I.D. 3 1/2 in.

Chlorides 4,000 P.P.M. Test Tool Length 27 ft. Tool Size 3 1/2 - IF in.

Jars: Make Bowen Serial Number Not Run Anchor Length 31' perf. w/31' drill pipe Size 4 1/2 - FH in.

Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 - XH in.

Blow: 1st Open: Weak, 1/2 in., blow increasing to 1 1/2 ins. No blow back during shut-in.

2nd Open: Weak, surface blow throughout. No blow back during shut-in.

Recovered 30 ft. of slightly oil cut drilling mud = .307800 bbls. (Grind out: 5%-oil; 95%-mud) System mud

Recovered      ft. of     

Recovered      ft. of     

Recovered      ft. of     

Recovered      ft. of     

Remarks Tool Sample Grind Out: 6%-oil; 94%-mud

Time Set Packer(s) 7:53 <sup>A.M.</sup>~~P.M.~~ Time Started Off Bottom 10:53 <sup>A.M.</sup>~~P.M.~~ Maximum Temperature 116°

Initial Hydrostatic Pressure ..... (A) 2155 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 3 P.S.I. to (C) 11 P.S.I.

Initial Closed In Period ..... Minutes 45 (D) 1096 P.S.I.

Final Flow Period ..... Minutes 45 (E) 13 P.S.I. to (F) 20 P.S.I.

Final Closed In Period ..... Minutes 60 (G) 1069 P.S.I.

Final Hydrostatic Pressure ..... (H) 2154 P.S.I.



**DIAMOND TESTING**  
P. O. Box 157  
HOISINGTON, KANSAS 67544  
(800) 542-7313

Page 2 of 3 Pages

**FLUID SAMPLE DATA**

Company Ritchie Exploration, Inc.

Lease & Well No. Keavs No. 1

Date 3-13-06 Sec. 20 Twp. 17 S Range 30 W

Formation Test No. 4 Interval Tested From 4,483 ft. to 4,545 ft. Total Depth 4,545 ft.

Formation Cherokee/Johnson

	<u>MUD PIT</u>	<u>RECOVERY</u>
Viscosity	<u>50</u> CP	<u>47</u> CP
Weight	<u>9.3</u>	<u>9.3</u>
Water Loss	<u>7.2</u> CC	<u>7.2</u> CC
PH Factor	<u>10.5</u>	<u>10.0</u>

	<u>RESISTIVITY</u>	<u>CHLORIDE CONTENT</u>
Recovery Water	<u>--</u> @ <u>--</u> °F.	<u>--</u> ppm
Recovery Mud	<u>1.10</u> @ <u>70</u> °F.	<u>5,800</u> ppm
Recovery Mud Filtrate	<u>1.15</u> @ <u>76</u> °F.	<u>5,000</u> ppm
Mud Pit Sample	<u>1.20</u> @ <u>60</u> °F.	<u>6,000</u> ppm
Mud Pit Sample Filtrate	<u>1.30</u> @ <u>62</u> °F.	<u>5,200</u> ppm

Sample Taken By ROGER D. FRIEDLY

Witness By KIM B. SHOEMAKER

Remarks Pit filtrate triton dish chlorides were 4,000 Ppm.  
Recovery filtrate triton dish chlorides were 4,200 Ppm.

## GENERAL INFORMATION

### Client Information:

Company: RITCHIE EXPLORATION, INC.

Contact: CRAIG CAULK

Phone: Fax: e-mail:

### Site Information:

Contact: KIM SHOEMAKER

Phone: Fax: e-mail:

### Well Information:

Name: KEAVS #1

Operator: RITCHIE EXPLORATION, INC.

Location-Downhole: DST #4 CHEROKEE / JOHNSON 4,483' - 4,545'

Location-Surface: SEC 20-17S-30W LANE COUNTY

### Test Information:

Company: DIAMOND TESTING

Representative: ROGER D. FRIEDLY

Supervisor: KIM SHOEMAKER

Test Type: CONVENTIONAL Job Number:

Test Unit: NO. 1

Start Date: 2006/03/13 Start Time: 04:55:00

End Date: 2006/03/13 End Time: 12:42:00

Report Date: Prepared By:

Qualified By:

### Remarks:

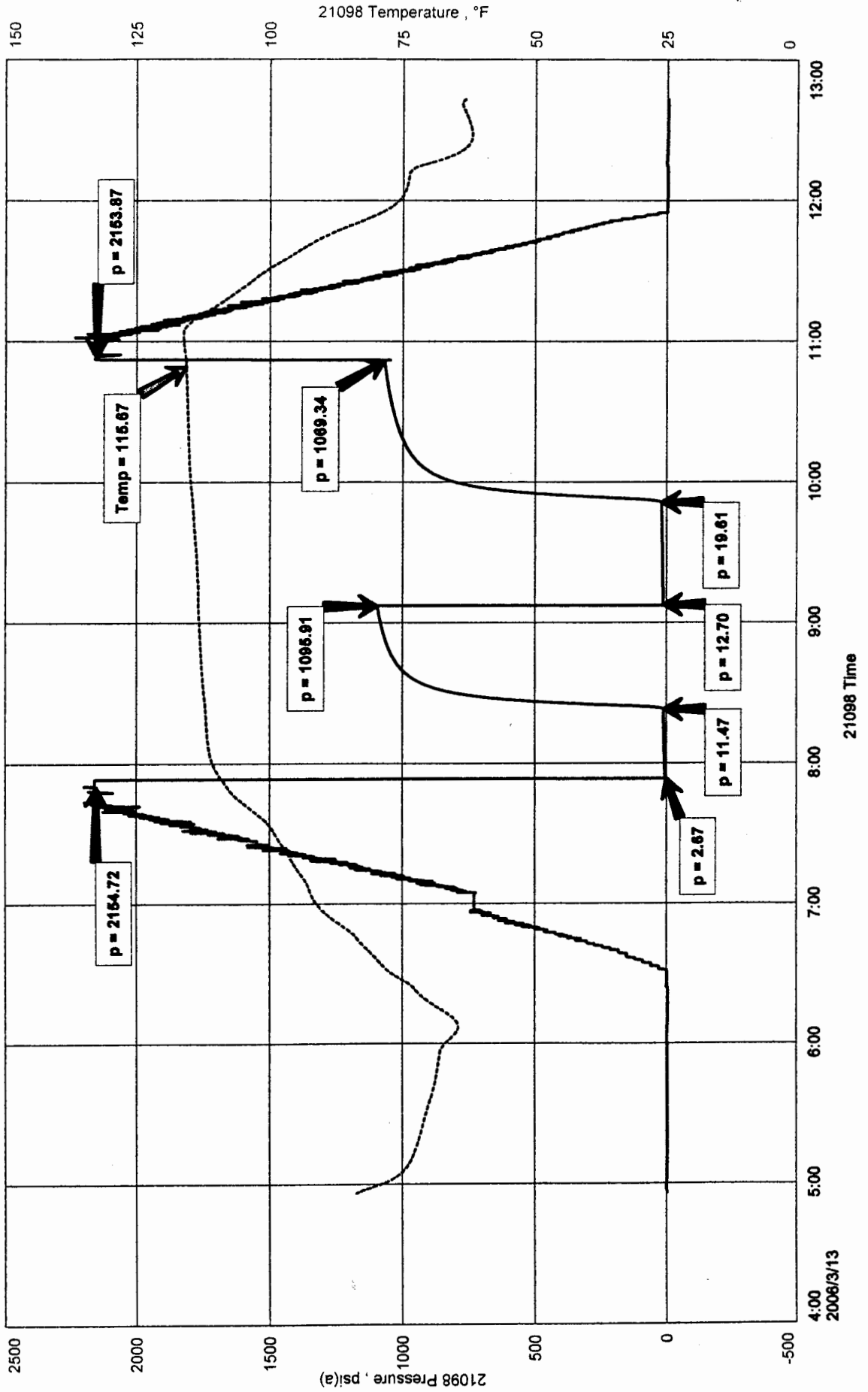
RECOVERED: 30' SLT OCM 5% OIL, 95% MUD

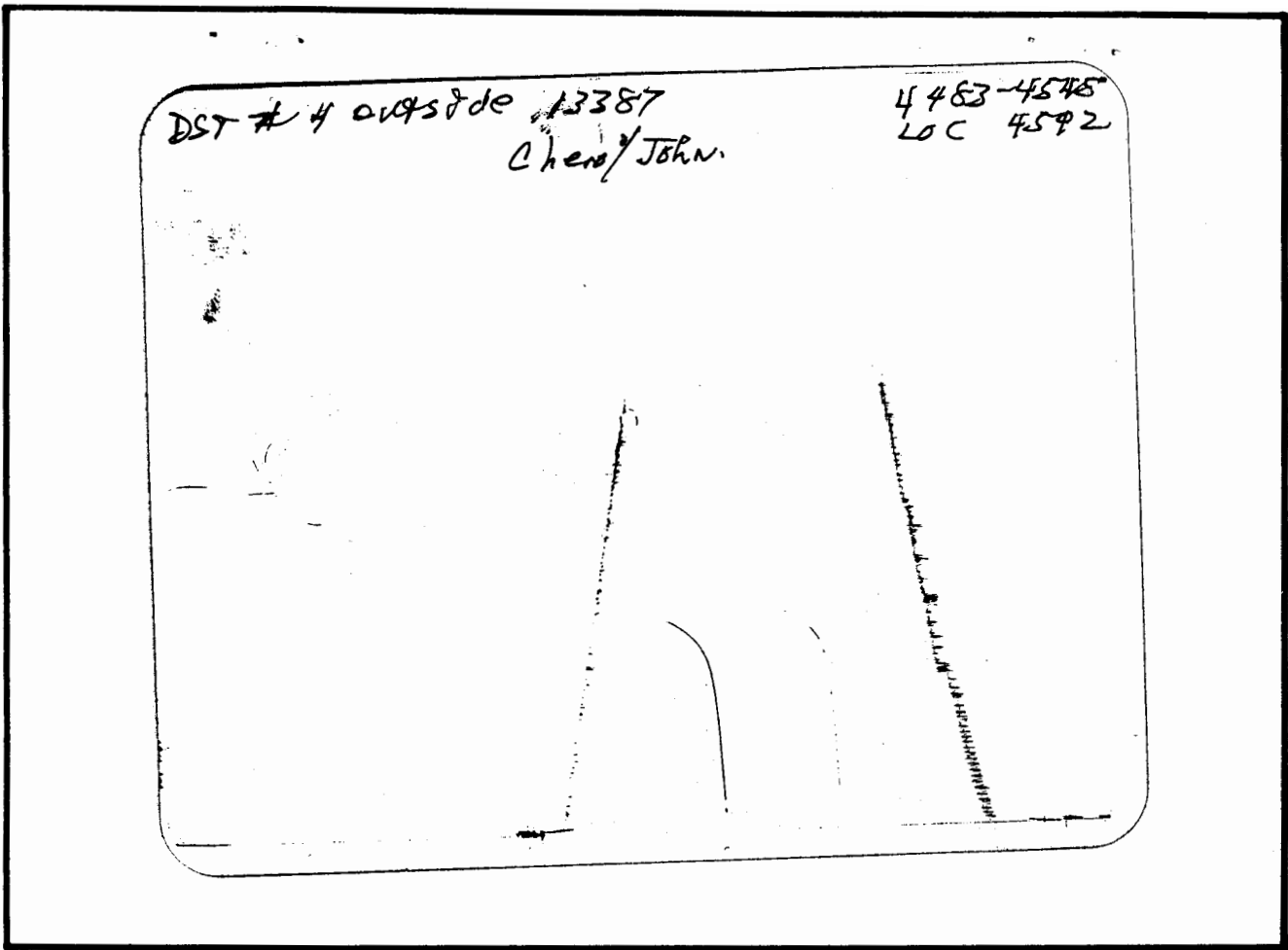
TOOL SAMPLE: 6% OIL, 94% MUD

RITCHEE EXPLORATION, INC.  
 DST #4 CHEROKEE / JOHNSON 4,483' - 4,545'  
 Start Test Date: 2006/03/13  
 Final Test Date: 2006/03/13

Formation: DST #4 CHEROKEE / JOHNSON 4,483' - 4,545'  
 Pool: WILDCAT

# KEAVS #1





This is an actual photograph of recorder chart.

POINT	PRESSURE Elec.		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud .....	2155	2155	PSI
(B) First Initial Flow Pressure.....	3	3	PSI
(C) First Final Flow Pressure .....	11	11	PSI
(D) Initial Closed-in Pressure .....	1096	1096	PSI
(E) Second Initial Flow Pressure.....	13	13	PSI
(F) Second Final Flow Pressure.....	20	20	PSI
(G) Final Closed-in Pressure.....	1069	1069	PSI
(H) Final Hydrostatic Mud.....	2154	2154	PSI