



DRILL STEM TEST REPORT

Prepared For: **Diversified Operating Corp.**

15000 West 6th Ave. Ste 102 Golden, CO
80401

ATTN: Bill Kemp

10/31/21

Berryman 10-15-5

Start Date: 2006.01.18 @ 01:30:38

End Date: 2006.01.18 @ 11:02:17

Job Ticket #: 22282 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Diversified Operating Corp.

Berryman 10-15-5

15000 West 6th Ave. Ste 102 Golden, CO 80401

10/31/21

ATTN: Bill Kemp

Job Ticket: 22282

DST#: 1

Test Start: 2006.01.18 @ 01:30:38

GENERAL INFORMATION:

Formation: **Miss. L.S.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:04:58

Time Test Ended: 11:02:17

Test Type: Conventional Straddle

Tester: Chris Hagman

Unit No: 34

Interval: **5137.00 ft (KB) To 5148.00 ft (KB) (TVD)**

Reference Elevations: 2206.00 ft (KB)

Total Depth: 5159.00 ft (KB) (TVD)

2196.00 ft (CF)

Hole Diameter: 7.78 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 6752 Inside

Press@RunDepth: 22.95 psig @ 5139.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2006.01.18

End Date: 2006.01.18

Last Calib.: 1899.12.30

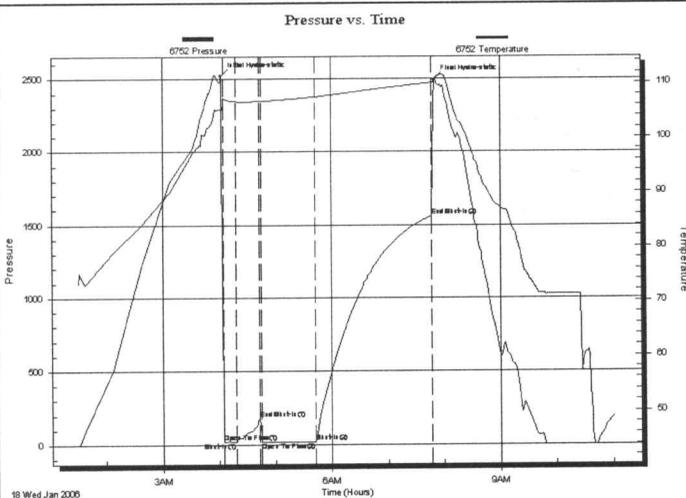
Start Time: 01:30:38

End Time: 11:02:18

Time On Btm: 2006.01.18 @ 04:02:17

Time Off Btm: 2006.01.18 @ 07:49:38

TEST COMMENT: IF: Weak surface blow
 IS: No blow back
 FF: BOB 30 min., strong steady blow
 FS: No blow back



PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2521.89	105.11	Initial Hydro-static
3	23.39	107.15	Open To Flow (1)
16	20.10	106.61	Shut-In(1)
41	175.55	106.66	End Shut-In(1)
43	19.61	106.62	Open To Flow (2)
101	22.95	107.43	Shut-In(2)
225	1559.69	109.97	End Shut-In(2)
228	2494.61	110.71	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	5%G,95%M	0.07

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Diversified Operating Corp.

Berryman 10-15-5

15000 West 6th-Ave. Ste 102 Golden, CO 80401

10/31/21

Job Ticket: 22282

DST#: 1

ATTN: Bill Kemp

Test Start: 2006.01.18 @ 01:30:38

Tool Information

Drill Pipe:	Length: 4513.00 ft	Diameter: 3.80 inches	Volume: 63.31 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 607.00 ft	Diameter: 2.25 inches	Volume: 2.99 bbl	Weight to Pull Loose: 100000.0 lb
		<u>Total Volume:</u>	<u>66.30 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	5137.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	5144.00 ft			
Interval between Packers:	7.00 ft			
Tool Length:	53.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:
Graphs matched, no straddle

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			5107.00	
Shut In Tool	5.00			5112.00	
Sampler	3.00			5115.00	
Hydraulic tool	5.00			5120.00	
Jars	5.00			5125.00	
Safety Joint	3.00			5128.00	
Packer	5.00			5133.00	31.00 Bottom Of Top Packer
Packer	4.00			5137.00	
Stubb	1.00			5138.00	
Perforations	1.00			5139.00	
Recorder	0.00	6752	Inside	5139.00	
Perforations	4.00			5143.00	
Recorder	0.00	13630	Inside	5143.00	
Blank Off Sub	1.00			5144.00	7.00 Tool Interval
Packer	4.00			5148.00	
Stubb	1.00			5149.00	
Perforations	7.00			5156.00	
Recorder	0.00	13579	Below	5156.00	
Bullnose	3.00			5159.00	15.00 Bottom Packers & Anchor

Total Tool Length: 53.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Diversified Operating Corp.

Berryman 10-15-5

15000 West 6th Ave. Ste 102 Golden, CO 80401

10/31/21

Job Ticket: 22282

DST#: 1

ATTN: Bill Kemp

Test Start: 2006.01.18 @ 01:30:38

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

7750 ppm

Viscosity: 45.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	5%G,95%M	0.074

Total Length: 15.00 ft Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

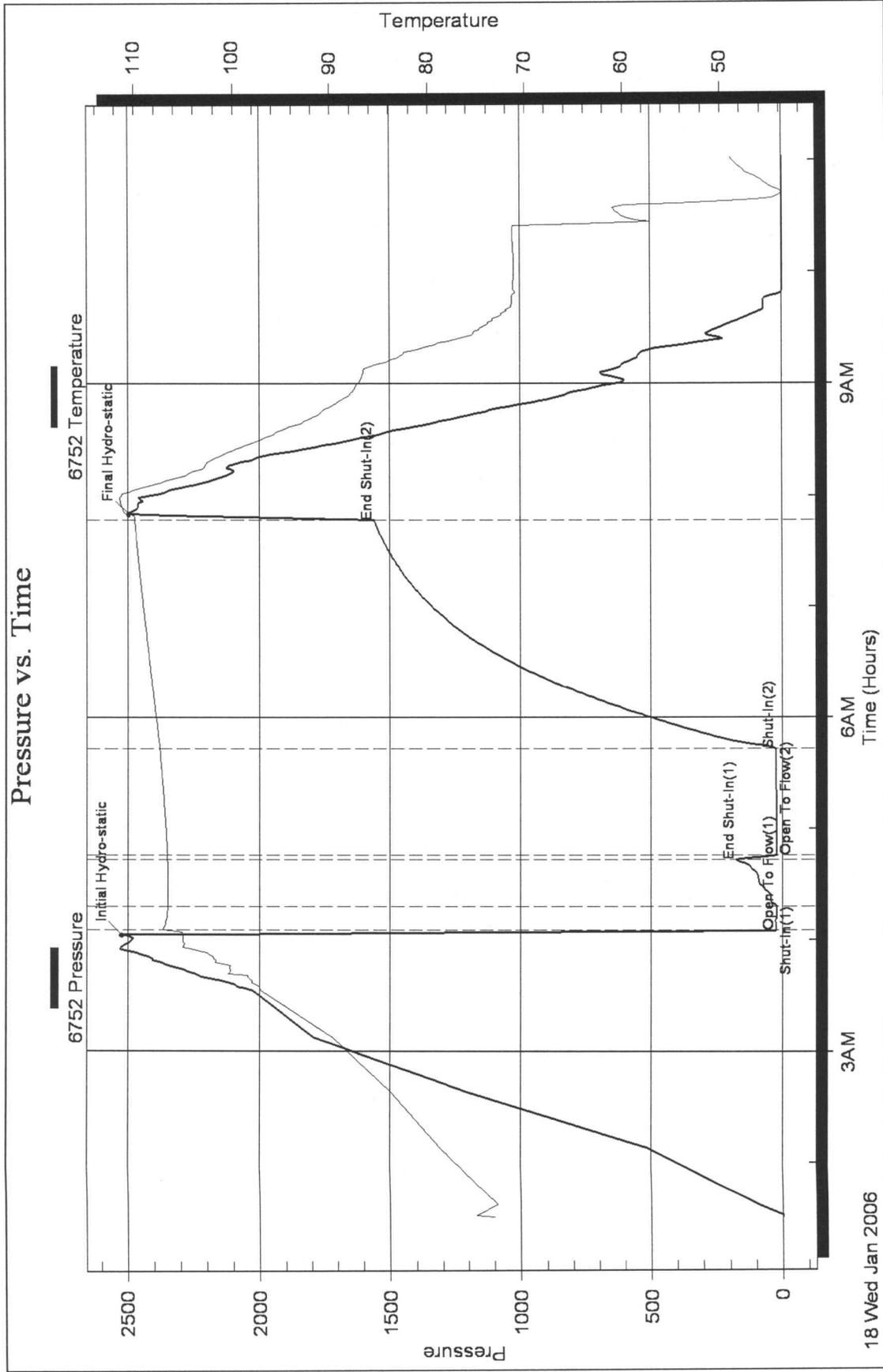
Laboratory Name:

Laboratory Location:

Recovery Comments: RW=.920@61F=7750ppm

Sampler=9.9CF Gas@1350psi

Pressure vs. Time



18 Wed Jan 2006



DRILL STEM TEST REPORT

Prepared For: **Diversified Operating Corp.**

15000 West 6th Ave. Ste 102 Golden, CO
80401

ATTN: Bill Kemp

10/31/21

Berryman 10-15-5

Start Date: 2006.01.20 @ 14:16:21

End Date: 2006.01.22 @ 04:38:10

Job Ticket #: 22283 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Diversified Operating Corp.

Berryman 10-15-5

15000 West 6th Ave. Ste 102 Golden, CO 80401

10/31/21

ATTN: Bill Kemp

Job Ticket: 22283

DST#: 2

Test Start: 2006.01.20 @ 14:16:21

GENERAL INFORMATION:

Formation: **Viola Lwr.**

Deviated: **No Whipstock:** ft (KB)

Time Tool Opened: 17:15:00

Time Test Ended: 04:38:10

Test Type: Conventional Bottom Hole

Tester: Chris Hagman

Unit No: 34

Interval: **6035.00 ft (KB) To 6054.00 ft (KB) (TVD)**

Reference Elevations: 2206.00 ft (KB)

Total Depth: 6054.00 ft (KB) (TVD)

2196.00 ft (CF)

Hole Diameter: 7.78 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 6752 Inside

Press@RunDepth: 27.66 psig @ 6037.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2006.01.20 End Date: 2006.01.22

Last Calib.: 1899.12.30

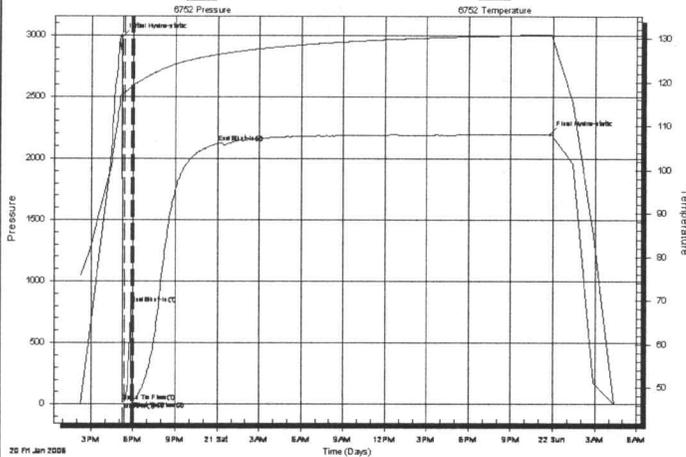
Start Time: 14:16:21 End Time: 04:38:10

Time On Btm: 2006.01.20 @ 17:09:00

Time Off Btm: 2006.01.21 @ 23:43:11

TEST COMMENT: IF: Weak surface blow
 IS: No blow back
 FF: No blow
 FSI: No blow back

Pressure vs. Time



PRESSURE SUMMARY

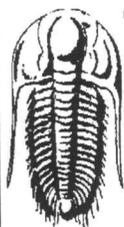
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2984.29	117.19	Initial Hydro-static
6	19.40	117.40	Open To Flow (1)
13	21.45	117.65	Shut-In(1)
41	816.02	118.93	End Shut-In(1)
45	23.88	119.02	Open To Flow (2)
52	27.66	119.40	Shut-In(2)
413	2126.19	126.32	End Shut-In(2)
1835	2192.20	130.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Diversified Operating Corp.

Berryman 10-15-5

15000 West 6th Ave. Ste 102 Golden, CO 80401

10/31/21

Job Ticket: 22283

DST#: 2

ATTN: Bill Kemp

Test Start: 2006.01.20 @ 14:16:21

Tool Information

Drill Pipe:	Length: 5419.00 ft	Diameter: 3.80 inches	Volume: 76.01 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 607.00 ft	Diameter: 2.25 inches	Volume: 2.99 bbl	Weight to Pull Loose: 160000.0 lb
			<u>Total Volume: 79.00 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 95000.00 lb
Depth to Top Packer:	6035.00 ft			Final 95000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	19.00 ft			
Tool Length:	50.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:
Tool stuck, got it loose 0130 1-22-06

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			6005.00	
Shut In Tool	5.00			6010.00	
Sampler	3.00			6013.00	
Hydraulic tool	5.00			6018.00	
Jars	5.00			6023.00	
Safety Joint	3.00			6026.00	
Packer	5.00			6031.00	31.00 Bottom Of Top Packer
Packer	4.00			6035.00	
Stubb	1.00			6036.00	
Perforations	1.00			6037.00	
Recorder	0.00	6752	Inside	6037.00	
Perforations	14.00			6051.00	
Recorder	0.00	13630	Inside	6051.00	
Bullnose	3.00			6054.00	19.00 Bottom Packers & Anchor

Total Tool Length: 50.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Diversified Operating Corp.

Berryman 10-15-5

15000 West 6th Ave. Ste 102 Golden, CO 80401

10/31/21

Job Ticket: 22283

DST#: 2

ATTN: Bill Kemp

Test Start: 2006.01.20 @ 14:16:21

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

13000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl

Total Length: ft

Total Volume: bbl

Num Fluid Samples: 0

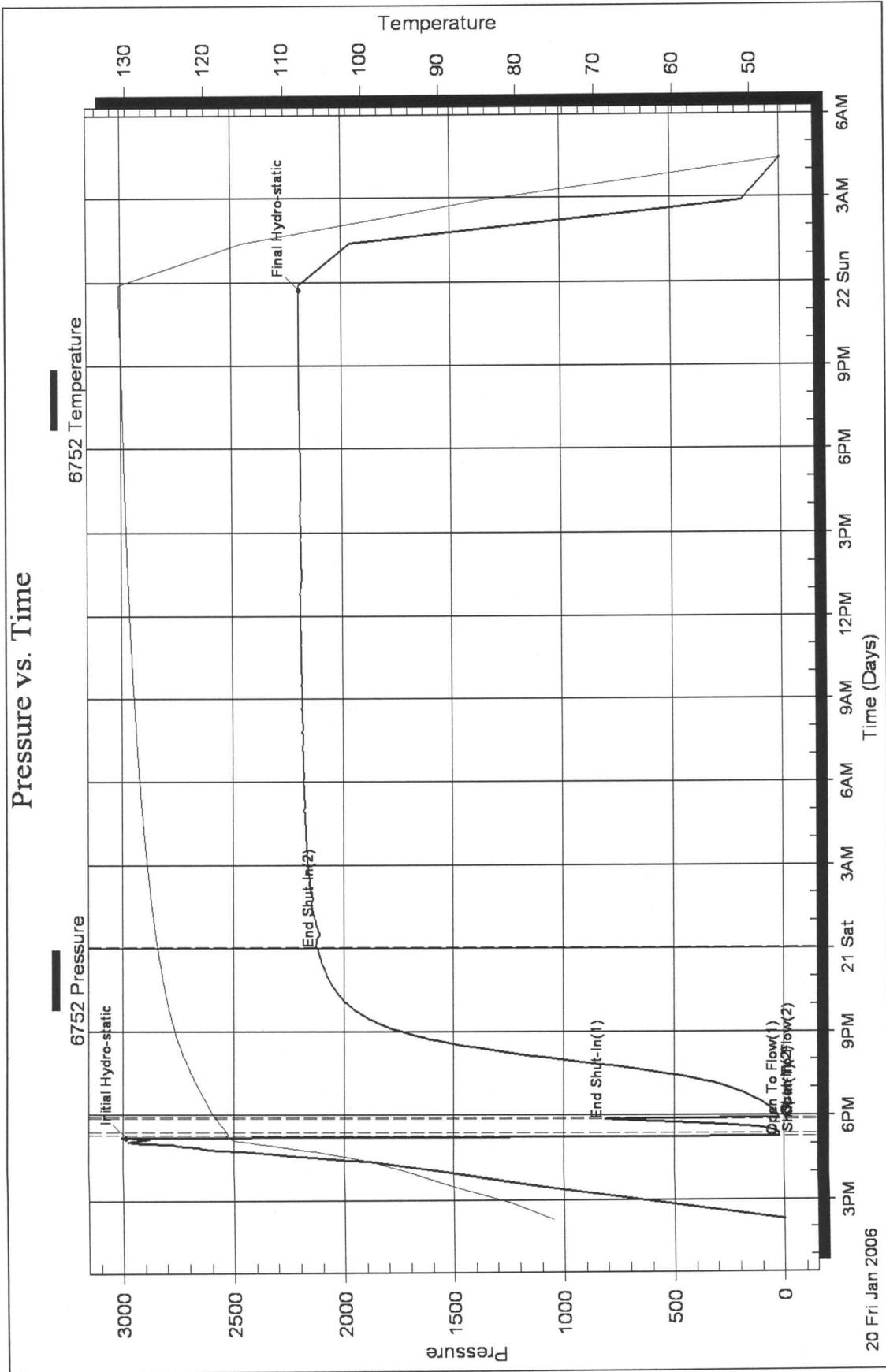
Num Gas Bombs: 0

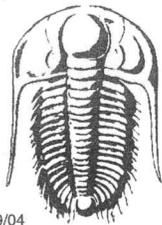
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler=1000ml water, 3000ml mud, 125psi, rw=.620@54F=13000ppm





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

8336
No 22282

Test Ticket

Well Name & No. Berryman 10-15-5 Test No. 1 Date 1-18-06
 Company Diversified Operating Corp. Zone Tested Miss. L.S.
 Address 15000 West 6th Ave Suite 102 Golden, CO 80601 Elevation 2206 KB 2196 GL
 Co. Rep / Geo. Bill Kemp Cont. Murphy 21 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 10 Twp. 31 Rge. 21 Co. Clark State KS
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested S137-S148 Initial Str Wt./Lbs. 80K Unseated Str Wt./Lbs. 80K
 Anchor Length 11' Wt. Set Lbs. 25K Wt. Pulled Loose/Lbs. 100K
 Top Packer Depth S132 Tool Weight 2K
 Bottom Packer Depth S137 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓
 Total Depth S159 Wt. Pipe Run N.A. Drill Collar Run 607 *Drill Pipe*
 Mud Wt. 9.4 LCM 4# Vis. 45 WL 8.8 Drill Pipe Size 4.5x18 Ft. Run 4513

Blow Description IF: Weak surface blow
ISB: No blow back * Graphs Matched, no
RF: BOB 30 min, strong steady blow Straddle
FSL: No blow back

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
Rec. <u>15</u>	Feet of <u>gas cut mud</u>	<u>5</u> %gas	%oil %water <u>95</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

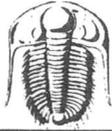
BHT 110 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW .920 @ 61 °F Chlorides 7750 ppm Recovery _____ Chlorides 4000 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>2522</u> PSI		<u>6752 (0130)</u>	<u>Spind 1200</u>
(B) First Initial Flow Pressure	<u>23</u> PSI		<u>5139</u>	Jars <u>200</u>
(C) First Final Flow Pressure	<u>20</u> PSI		<u>13630</u>	Safety Jt. <u>50</u>
(D) Initial Shut-In Pressure	<u>176</u> PSI		<u>5143</u>	Circ Sub _____
(E) Second Initial Flow Pressure	<u>20</u> PSI		<u>13759</u>	Sampler <u>200</u>
(F) Second Final Flow Pressure	<u>23</u> PSI		<u>5152</u>	Straddle <u>250</u>
(G) Final Shut-In Pressure	<u>1560</u> PSI	Initial Opening <u>10</u>		Ext. Packer <u>150</u>
(Q) Final Hydrostatic Mud	<u>2495</u> PSI	Initial Shut-In <u>30</u>		Shale Packer _____

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Approved By [Signature]
 Our Representative [Signature]

Final Flow	<u>60</u>	Ruined Packer	_____
Final Shut-In	<u>120</u>	Mileage <u>2750</u>	<u>250</u>
T-On Location	<u>0030</u>	Sub Total:	<u>2300</u> <u>2300</u>
T-Started	<u>0130</u>	Std. By	<u>A.S</u> <u>25</u>
T-Open	<u>0405</u>	Other	_____
T-Pulled	<u>0745</u>	Total:	<u>2325</u> <u>2325</u>
T-Out	<u>1100</u>		



TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 22282 Date 1-18-06

Company Name Diversified Operating Corp.

Lease Berryman P-15-5 Test No. 1

County Clark, KS Sec. 10 Twp. 31 Rng. 21

SAMPLER RECOVERY

Gas 9.9 cF ML

Oil 0 ML

Mud 0 ML

Water 0 ML

Other 0 ML

Pressure 1350 psi ML

Total 9.9 cF ML

PIT MUD ANALYSIS

Chlorides 4000 ppm.

Resistivity _____ ohms @ _____ F

Viscosity 45

Mud Weight 9.4

Filtrate 8.8

Other 4 # LCM

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F

Chlorides _____ ppm.

Gravity _____ corrected @ 60F

PIPE RECOVERY

TOP

Resistivity .920 ohms @ 61 F

Chlorides 7750 ppm.

MIDDLE

Resistivity _____ ohms @ _____ F

Chlorides _____ ppm.

BOTTOM

Resistivity _____ ohms @ _____ F

Chlorides _____ ppm.

CHART PAGE

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

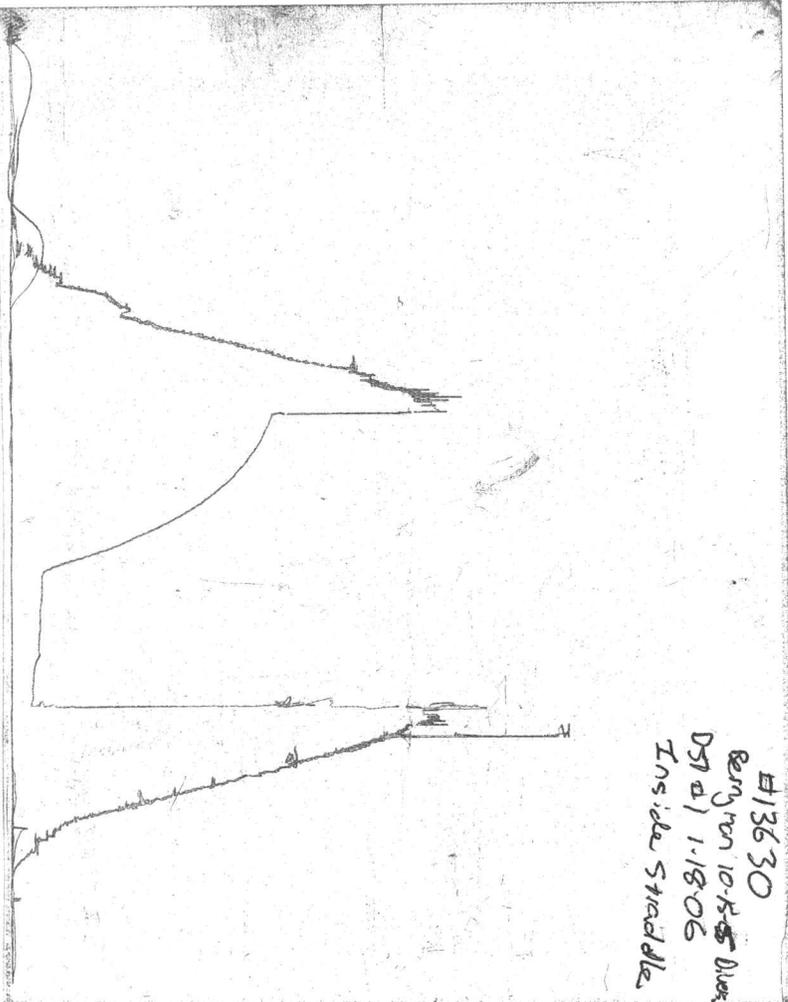
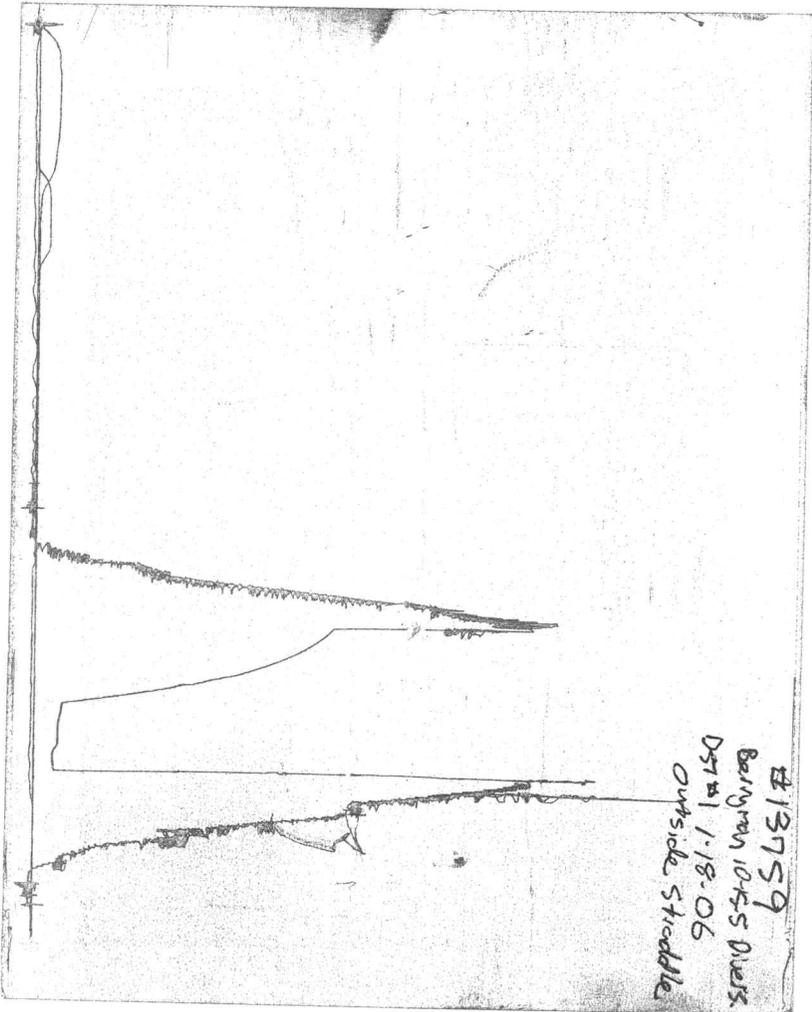
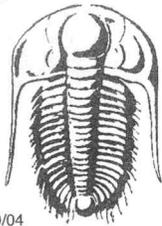


CHART PAGE

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





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 22283

9/04

Test Ticket

Well Name & No. Berryman 10-15.5 Test No. 2 Date 1-20-06
 Company Diversified Operating Corp Zone Tested Viola Lwr.
 Address 15000 West 6th Ave. Suite 102 Golden, CO 80401 Elevation 2206 KB ~~2215~~ 2206
 Co. Rep / Geo. Bill Kemp Cont. Murphy 21 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 10 Twp. 31 Rge. 21 Co. Clark State KS
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 6035-6054 Initial Str Wt./Lbs. 95K Unseated Str Wt./Lbs. 95K
 Anchor Length 19' Wt. Set Lbs. 20K Wt. Pulled Loose/Lbs. 160K
 Top Packer Depth 6030 Tool Weight 2K
 Bottom Packer Depth 6035 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓
 Total Depth 6054 Wt. Pipe Run N.A. Drill Collar Run 607 Drill R
 Mud Wt. 9.1 LCM 4# Vis. 51 WL 8.0 Drill Pipe Size 4.5x11 Ft. Run 5419

Blow Description IF: Weak surface blow
IS: No blow back
FF: No blow
FSI: No blow back

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
<u>120'</u>	<u>Ø</u>	<u>120</u>	<u>Ø</u>
Rec. <u>120</u> Feet of <u>mud</u>	%gas	%oil	%water <u>100</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 126 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW -620 @ 54 °F Chlorides 13000 ppm Recovery _____ Chlorides 4000 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>2984</u> PSI		<u>6757(2:15)</u>	<u>✓ con.</u> <u>1300</u>
(B) First Initial Flow Pressure	<u>19</u> PSI		(depth) <u>6037</u>	Jars <u>✓</u> <u>200</u>
(C) First Final Flow Pressure	<u>21</u> PSI		Recorder No. <u>13630</u>	Safety Jt. <u>✓</u> <u>50</u>
(D) Initial Shut-In Pressure	<u>816</u> PSI		(depth) <u>6051</u>	Circ Sub <u>✓</u> <u>35</u>
(E) Second Initial Flow Pressure	<u>24</u> PSI		Recorder No. _____	Sampler <u>✓</u> <u>200</u>
(F) Second Final Flow Pressure	<u>28</u> PSI		(depth) _____	Straddle _____
(G) Final Shut-In Pressure	<u>2126</u> PSI	Initial Opening	<u>10</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud	<u>2192</u> PSI	Initial Shut-In	<u>30</u>	Shale Packer _____
		Final Flow	<u>10</u>	Ruined Packer _____
		Final Shut-In	<u>120</u>	Mileage <u>✓ x250</u> <u>250</u>
		T-On Location	<u>1320</u>	Sub Total: <u>2085</u> <u>2035</u>
		T-Started	<u>1415</u>	Std. By <u>✓ x24 hrs.</u> <u>500</u>
		T-Open	<u>1710</u>	Other _____
		T-Pulled	<u>2000</u>	Total: <u>2585</u> <u>\$2535</u>
		T-Out	<u>0430(1-23-06)</u>	

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Approved By [Signature]
 Our Representative [Signature]



TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 22283 Date 1-20-06
Company Name Diversified Operating Corp.
Lease Berryman 10-15-S Test No. 2
County Clark, KS Sec. 10 Twp. 31 Rng. 21

SAMPLER RECOVERY

Gas 0 ML
Oil 0 ML
Mud 3000 ML
Water 1000 ML
Other 0 ML
Pressure 125 psi ML
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 4000 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 51
Mud Weight 9.1
Filtrate 8.0
Other 4²LCM

SAMPLER ANALYSIS

Resistivity .670 ohms @ 54 F
Chlorides 13000 ppm.
Gravity _____ corrected @60F

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

CHART PAGE

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

