

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name FARMERS STATE #1 Test No. 1 Date 10/11/93
Company CHARTER PRODUCTION COMPANY Zone KEYS/ST GEN.
Address 224 EAST DOUGLAS #400 WICHITA KS 67202 Elevation 3360
Co. Rep./Geo. ROBERT SMITH Cont. ZENITH DRLG RIG #7 Est. Ft. of Pay 20
Location: Sec. 12 Twp. 30S Rge. 41W Co. STANTON State KS

Interval Tested 5401-5474 Drill Pipe Size 4.5" XH
Anchor Length 73 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 5396 Drill Collar - 2.25 Ft. Run 489 / H-90
Bottom Packer Depth 5401-5474 Mud Wt. 8.8 lb/Gal.
Total Depth 5668 Viscosity 60 Filtrate 8.8

Tool Open @ 2:00 PM Initial Blow STRONG BLOW AS TOOL OPENED - LOST PACKER SEAT 15 MINUTES INTO INITIAL OPENING-LOST PACKER SEAT

Final Blow _____

Recovery - Total Feet 2930 Flush Tool? NO

Rec. 2930 Feet of MUDDY WATER - 20% WTR/ 80% MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 130 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.95 @ 85 °F Chlorides 5000 ppm Recovery Chlorides 1000 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. 13337 Range 3975

(B) First Initial Flow Pressure _____ PSI @ (depth) 5439 w / Clock No. 17639

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. 10333 Range 4050

(D) Initial Shut-in Pressure _____ PSI @ (depth) 5469 w / Clock No. 8376

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. 1055 Range 4100

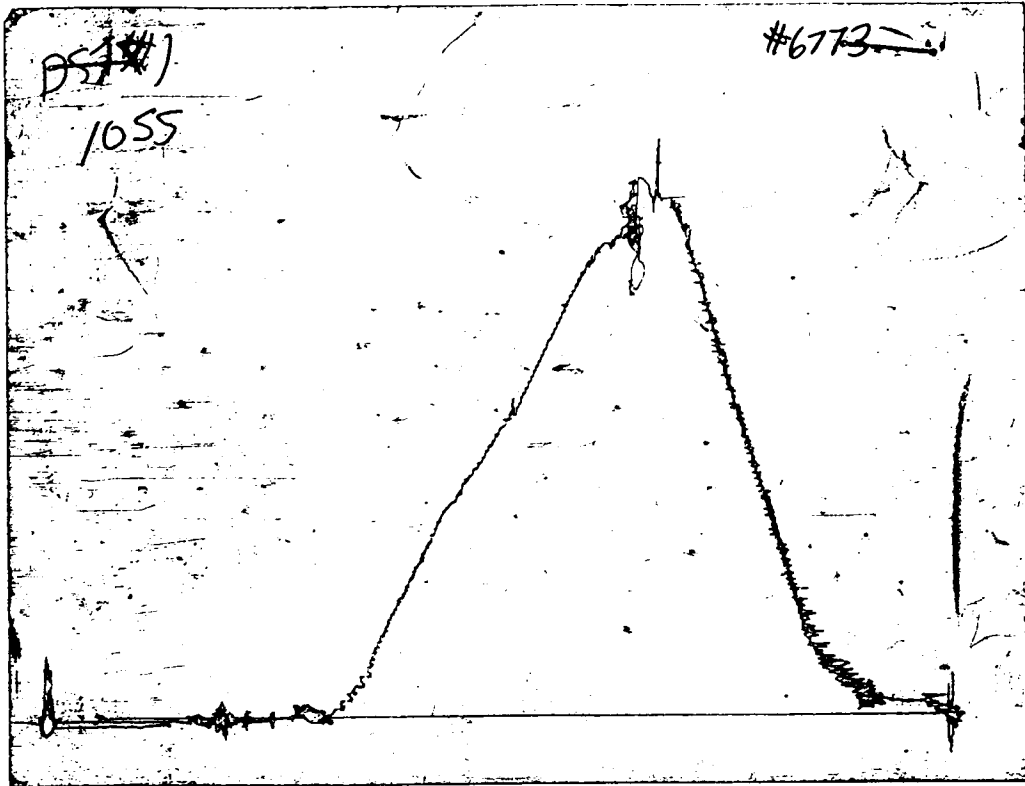
(F) Second Final Flow Pressure _____ PSI @ (depth) 5665 w / Clock No. 17640

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

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in _____ Final Shut-in _____

Our Representative ROBERT COLLINS

CHART PAGE



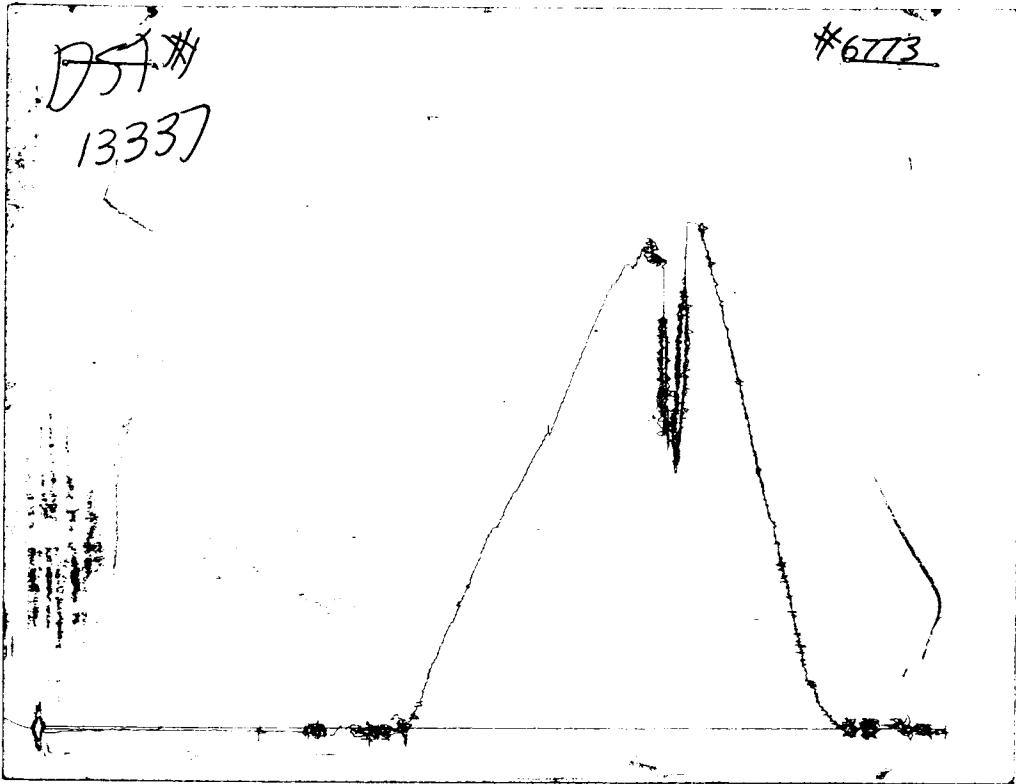
This is an actual photograph of recorder chart

FIELD
READING

OFFICE
READING

- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD

CHART PAGE



This is an actual photograph of recorder chart

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- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD

TRILOBITE TESTING L.L.C.

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Test Ticket

No 6773

Well Name & No. <u>Farmers State #1</u>	Test No. <u>1</u>	Date <u>10-11-93</u>
Company <u>Charter</u>	Zone Tested <u>Keys/st GEN</u>	
Address _____	Elevation <u>3360 KB</u>	
Co. Rep./Geo. <u>Robert Smith</u>	Cont. <u>Zenith #7</u>	Est. Ft. of Pay <u>20</u>
Location: Sec. <u>12</u> Twp. <u>30</u> Rge. <u>41W</u>	Co. <u>Stanton</u> State <u>KS</u>	
No. of Copies <u>10</u> Distribution Sheet _____	Yes <input checked="" type="checkbox"/> No Turnkey _____	Yes <input checked="" type="checkbox"/> No _____ Evaluation _____

Interval Tested <u>5401-5474</u>	Drill Pipe Size <u>7-1/2 HA</u>
Anchor Length <u>73</u>	Top Choke — 1" Bottom Choke — 3/4"
Top Packer Depth <u>5396</u>	Hole Size — 77/8" Rubber Size — 63/4"
Bottom Packer Depth <u>5401 (5474)</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>5668</u>	Drill Collar — 2.25 Ft. Run <u>489 H-90</u>
Mud Wt. <u>8.8</u> lb/gal.	Viscosity <u>60</u> Filtrate <u>8.8</u>
Tool Open @ <u>2:00pm</u> Initial Blow <u>stone blow at stool opened lost packer set 15 min into (initial opening) MisRun (lost packer set seat)</u>	
Final Blow _____	

Recovery — Total Feet <u>2930</u>	Feet of Gas in Pipe _____	Flush Tool? <u>NO</u>
Rec. <u>2930</u> Feet Of <u>sludgy water</u>	% gas _____ % oil _____	<u>20</u> % water <u>80</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 130 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW 0.950 @ 85 °F Chlorides 5000 ppm Recovery Chlorides 1000 ppm System

- (A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. 13337 Range 3915
- (B) First Initial Flow Pressure _____ PSI @ (depth) 5439 w/Clock No. 17639
- (C) First Final Flow Pressure _____ PSI AK1 Recorder No. 10333 Range 4050
- (D) Initial Shut-In Pressure _____ PSI @ (depth) 5469 w/Clock No. 8376
- (E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. 1055 Range 4160
- (F) Second Final Flow Pressure _____ PSI @ (depth) 5665 w/Clock No. 17640
- (G) Final Shut-In Pressure _____ PSI Initial Opening _____ Test NO MR 500
- (H) Final Hydrostatic Mud _____ PSI Initial Shut-In _____ Jars 200

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.

Final Flow _____ Safety Joint 50
Final Shut-In _____ Straddle 250
Circ. Sub FWC
Sampler _____

Approved By [Signature]
Our Representative [Signature]

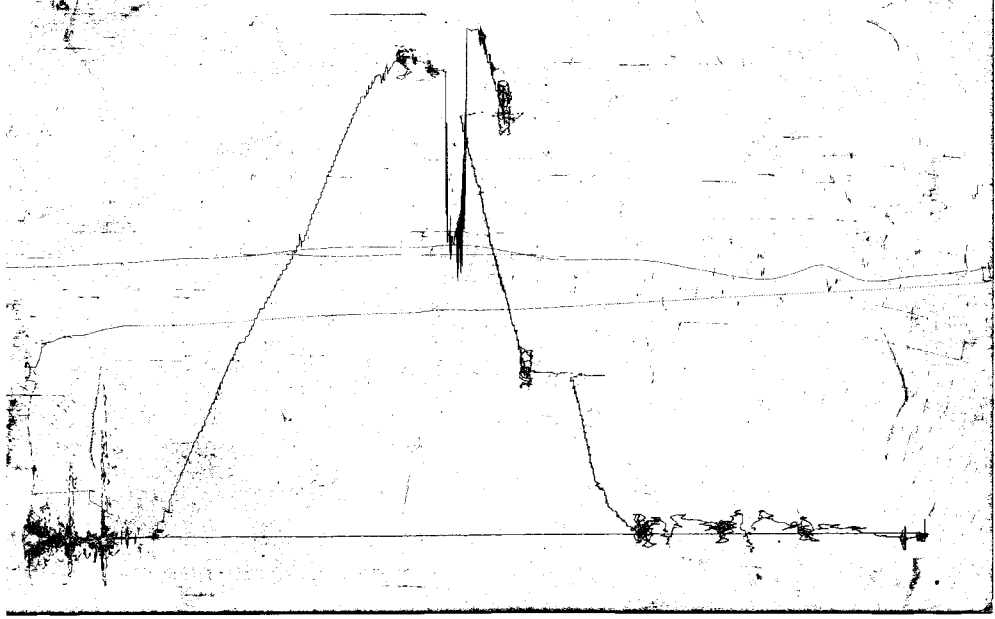
Extra Packer 150.00

Other _____

TOTAL PRICE \$ 1150.00

DATA
10333

0112



TRILOBITE TESTING, L.L.C.

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Drill-Stem Test Data

Well Name FARMERS STATE #1 Test No. 2 Date 10/12/93
Company CHARTER PRODUCTION COMPANY Zone KEYS
Address 224 EAST DOUGLAS #400 WICHITA KS 67202 Elevation 3360
Co. Rep./Geo. ROBERT SMITH Cont. ZENITH DRLG RIG #7 Est. Ft. of Pay 15
Location: Sec. 12 Twp. 30S Rge. 41W Co. STANTON State KS

Interval Tested 5302-5440 Drill Pipe Size 4.5" XH
Anchor Length 138 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 5297-5440 Drill Collar - 2.25 Ft. Run 489 / H-90
Bottom Packer Depth 5302-5445 Mud Wt. 8.8 lb/Gal.
Total Depth 5668 Viscosity 68 Filtrate 8

Tool Open @ 11:20 AM Initial Blow STRONG BLOW BUILT TO BOTTOM OF BUCKET IN 11 MINUTES

Final Blow FAIR BLOW BUILT TO 7.5"

Recovery - Total Feet 551 Flush Tool? NO

Rec. 300 Feet of WATERY MUD-5% WTR/ 95% MUD
Rec. 251 Feet of EMULSION -15% / 10% GAS/ 5% OIL/ 30% WTR/ 40% MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 132 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 1.04 @ 60 °F Chlorides 2000 ppm Recovery Chlorides 1000 ppm System

(A) Initial Hydrostatic Mud 2611.3 PSI AK1 Recorder No. 13337 Range 3975

(B) First Initial Flow Pressure 261.2 PSI @ (depth) 5399 w / Clock No. 25813

(C) First Final Flow Pressure 261.2 PSI AK1 Recorder No. 11038 Range 5075

(D) Initial Shut-in Pressure 1490.3 PSI @ (depth) 5429 w / Clock No. 25814

(E) Second Initial Flow Pressure 340.2 PSI AK1 Recorder No. 1055 Range 4100

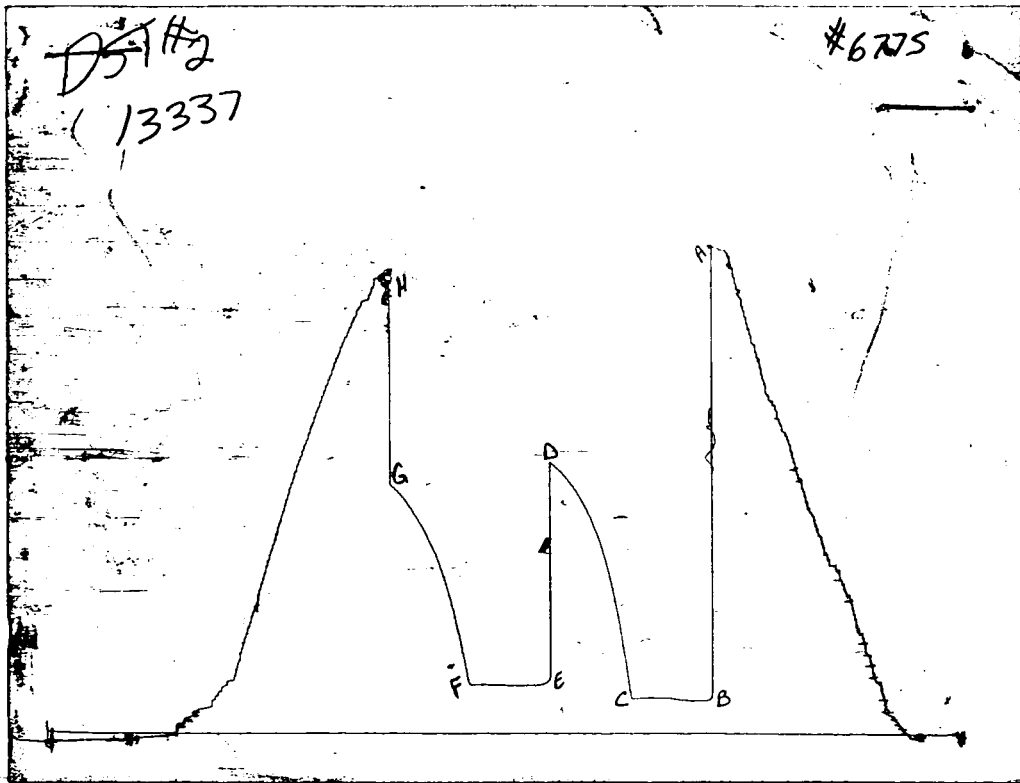
(F) Second Final Flow Pressure 340.2 PSI @ (depth) 5665 w / Clock No. 17639

(G) Final Shut-in Pressure 1388.4 PSI Initial Opening 60 Final Flow 60

(H) Final Hydrostatic Mud 2407.8 PSI Initial Shut-in 60 Final Shut-in 60

Our Representative ROBERT COLLINS

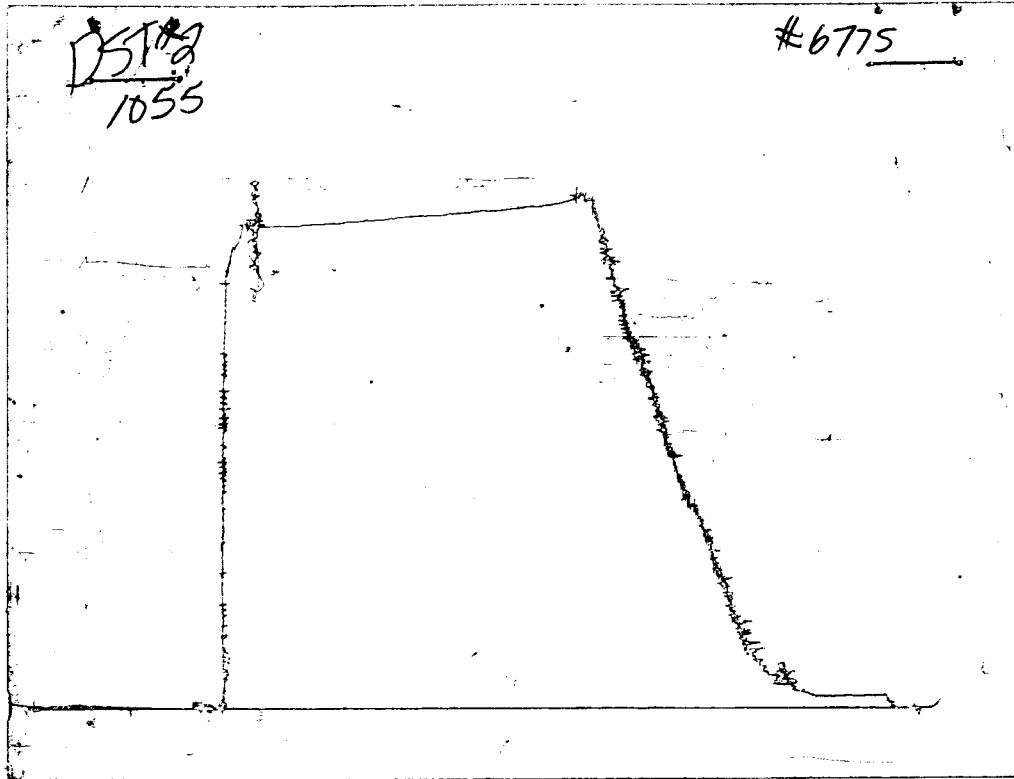
CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2606	2611.3
(B) FIRST INITIAL FLOW PRESSURE	257	261.2
(C) FIRST FINAL FLOW PRESSURE	257	261.2
(D) INITIAL CLOSED-IN PRESSURE	1486	1490.3
(E) SECOND INITIAL FLOW PRESSURE	336	340.2
(F) SECOND FINAL FLOW PRESSURE	336	340.2
(G) FINAL CLOSED-IN PRESSURE	1385	1388.4
(H) FINAL HYDROSTATIC MUD	2400	2407.8

CHART PAGE



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FIELD
READING

OFFICE
READING

- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD

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Test Ticket

No 6775

Well Name & No. <u>Farmers state #1</u>	Test No. <u>2</u>	Date <u>10-12-93</u>
Company <u>Charter Production Co</u>	Zone Tested <u>KEYS</u>	
Address <u>221 E Douglas Suite 400 Wichita KS 67202</u>	Elevation <u>3360</u>	
Co. Rep./Geo. <u>Robert Smith</u>	Cont. <u>Zenith #7</u>	Est. Ft. of Pay <u>15</u>
Location: Sec. <u>12</u> Twp. <u>30</u> Rge. <u>4/W</u>	Co. <u>Stanton</u>	State <u>KS</u>
No. of Copies <u>10</u>	Distribution Sheet <u>Yes</u> <input checked="" type="checkbox"/> <u>No</u> <input type="checkbox"/>	Turnkey <u>Yes</u> <input checked="" type="checkbox"/> <u>No</u> <input type="checkbox"/> Evaluation

Interval Tested <u>5302-5440</u>	Drill Pipe Size <u>4 1/2 x 4 1/4</u>
Anchor Length <u>138</u>	Top Choke — 1" Bottom Choke — 3/4"
Top Packer Depth <u>5297 (5440)</u>	Hole Size — 7 7/8" Rubber Size — 6 3/4"
Bottom Packer Depth <u>5302 (5445)</u>	Wt. Pipe I.D. — 2.7 Ft. Run
Total Depth <u>5668</u>	Drill Collar — 2.25 Ft. Run <u>189 (H-90)</u>
Mud Wt. <u>8.8</u> lb/gal.	Viscosity <u>68</u> Filtrate <u>8.0</u>
Tool Open @ <u>11:20 Am</u>	Initial Blow <u>strong blow build to bott of bucket in 11 min</u>

Final Blow Fair blow build to 74 in

Recovery — Total Feet <u>551</u>	Feet of Gas In Pipe	Flush Tool? <u>NO</u>
Rec. <u>300</u> Feet Of <u>Water Mud</u>	%gas %oil <u>5</u> %water <u>95</u> %mud	
Rec. <u>251</u> Feet Of <u>Emulsion</u>	<u>10</u> %gas <u>5</u> %oil <u>30</u> %water <u>40</u> %mud	
Rec. _____ Feet Of _____	%gas %oil %water %mud	
Rec. _____ Feet Of _____	%gas %oil %water %mud	
Rec. _____ Feet Of _____	%gas %oil %water %mud	

BHT 132 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW 1.04 @ 60 °F Chlorides 2000 ppm Recovery Chlorides 1000 ppm System

- (A) Initial Hydrostatic Mud 2606 PSI Ak1 Recorder No. 15337 Range 3975
- (B) First Initial Flow Pressure 257 PSI @ (depth) 5399 w/Clock No. 25813
- (C) First Final Flow Pressure 257 PSI AK1 Recorder No. 11038 Range 5075
- (D) Initial Shut-In Pressure 1486 PSI @ (depth) 5429 w/Clock No. 25814
- (E) Second Initial Flow Pressure 336 PSI AK1 Recorder No. 1055 Range 4100
- (F) Second Final Flow Pressure 336 PSI @ (depth) 5665 w/Clock No. 17639
- (G) Final Shut-In Pressure 1585 PSI Initial Opening 60 Test 700
- (H) Final Hydrostatic Mud 2400 PSI Initial Shut-In 60 Jars 200

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Final Flow 60 Safety Joint 50
 Final Shut-In 60 Straddle 250
 Circ. Sub ENE
 Sampler _____

Approved By [Signature]
 Our Representative R Collins

Extra Packer 150
 Other _____
 TOTAL PRICE \$ 1350.00

DS1-2
11038*

Character

*6775

