

Company Pan Western Petroleum, Inc. Lease & Well No. Peters "B" #1
Elevation ---- Formation Indian Cave Effective Pay - Ft. Ticket No. 9322
Date 2/26/81 Sec. 14 Twp. 27S Range 14W County Pratt State Kansas
Test Approved by Toby Elster Western Representative Stuart Stover
Formation Test No. 1 Interval Tested from 2895 ft. to 2935 ft. Total Depth 2935 ft.
Packer Depth 2890 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 2895 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 2915 ft. Recorder Number 11018 Cap. 4425
Bottom Recorder Depth (Outside) 2935 ft. Recorder Number 11019 Cap. 4500
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Ramco Drilling Rig #3 Drill Collar Length - I. D. - in.
Mud Type - Viscosity - Weight Pipe Length - I. D. - in.
Weight - Water Loss - cc. Drill Pipe Length - I. D. - in.
Chlorides - P.P.M. Test Tool Length 21 ft. Tool Size 3 1/2 in.
Jars: Make - Serial Number - Anchor Length 40 ft. Size 4 1/2 in.
Did Well Flow? - Reversed Out - Surface Choke Size 1/2 in. Bottom Choke Size 1/2 in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in.

Blow: Very weak throughout test.

Recovered 30 ft. of drilling mud

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Remarks: -

Time Set Packer(s) 12:20 ~~AM~~ P.M. Time Started Off Bottom 1:35 ~~AM~~ P.M. Maximum Temperature ?
Initial Hydrostatic Pressure (A) 1548 P.S.I.
Initial Flow Period 30 Minutes (B) 73 P.S.I. to (C) 53 P.S.I.
Initial Closed In Period 15 Minutes (D) 75 P.S.I.
Final Flow Period 15 Minutes (E) 63 P.S.I. to (F) 60 P.S.I.
Final Closed In Period 18 Minutes (G) 72 P.S.I.
Final Hydrostatic Pressure (H) 1471 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 2/26/81 Test Ticket No 9322
 Recorder No. 11018 Capacity 4425 Location 2915 Ft.
 Clock No. -- Elevation --- Well Temperature -- °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1548</u> P.S.I.	Open Tool	<u>12:20P</u> M	
B First Initial Flow Pressure	<u>73</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>53</u> P.S.I.	Initial Closed-in Pressure	<u>15</u> Mins.	<u>15</u> Mins.
D Initial Closed-in Pressure	<u>75</u> P.S.I.	Second Flow Pressure	<u>15</u> Mins.	<u>15</u> Mins.
E Second Initial Flow Pressure	<u>63</u> P.S.I.	Final Closed-in Pressure	<u>15</u> Mins.	<u>18</u> Mins.
F Second Final Flow Pressure	<u>60</u> P.S.I.			
G Final Closed-in Pressure	<u>72</u> P.S.I.			
H Final Hydrostatic Mud	<u>1471</u> P.S.I.			

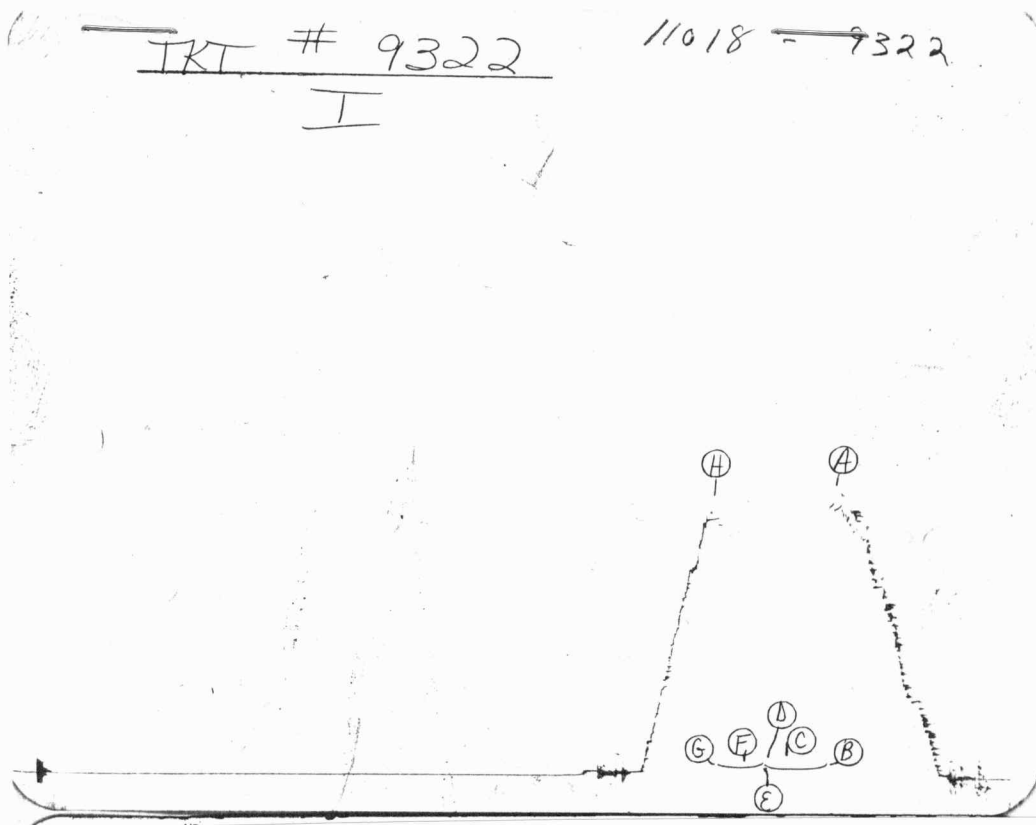
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>5</u> Inc.		Breakdown: <u>3</u> Inc.		Breakdown: <u>6</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>73</u>	<u>0</u>	<u>53</u>	<u>0</u>	<u>63</u>	<u>0</u>	<u>60</u>
P 2 <u>5</u>	<u>62</u>	<u>3</u>	<u>53</u>	<u>5</u>	<u>71</u>	<u>3</u>	<u>60</u>
P 3 <u>10</u>	<u>56</u>	<u>6</u>	<u>55</u>	<u>10</u>	<u>63</u>	<u>6</u>	<u>60</u>
P 4 <u>15</u>	<u>53</u>	<u>9</u>	<u>56</u>	<u>15</u>	<u>60</u>	<u>9</u>	<u>61</u>
P 5 <u>20</u>	<u>53</u>	<u>12</u>	<u>61</u>			<u>12</u>	<u>63</u>
P 6 <u>25</u>	<u>53</u>	<u>15</u>	<u>75</u>			<u>15</u>	<u>67</u>
P 7 <u>30</u>	<u>53</u>					<u>18</u>	<u>72</u>
P 8							
P 9							
P10							
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

TKT # 9322 11018 - 9322

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This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	1548	1548 PSI
(B) First Initial Flow Pressure	66	73 PSI
(C) First Final Flow Pressure	55	53 PSI
(D) Initial Closed-in Pressure	77	75 PSI
(E) Second Initial Flow Pressure	55	63 PSI
(F) Second Final Flow Pressure	55	60 PSI
(G) Final Closed-in Pressure	77	72 PSI
(H) Final Hydrostatic Mud	1471	1471 PSI

Company Pan Western Petroleum, Inc. Lease & Well No. Peters "B" #1
Elevation ---- Formation Mississippi Effective Pay - Ft. Ticket No. 9323
Date 3/3/81 Sec. 14 Twp. 27S Range 14W County Pratt State Kansas
Test Approved by Toby Elster Western Representative Stuart Stover
Formation Test No. 2 Interval Tested from 4336 ft. to 4395 ft. Total Depth 4395 ft.
Packer Depth 4331 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 4336 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 4346 ft. Recorder Number 11018 Cap. 4425
Bottom Recorder Depth (Outside) 4395 ft. Recorder Number 11019 Cap. 4500
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Ramco Drilling Rig #3 Drill Collar Length - I. D. - in.
Mud Type - Viscosity 40 Weight Pipe Length - I. D. - in.
Weight 9.6 Water Loss 16.2 cc. Drill Pipe Length 4315 I. D. 4.0 in.
Chlorides 26,000 P.P.M. Test Tool Length 21 ft. Tool Size 3 1/2 in.
Jars: Make - Serial Number - Anchor Length 59 ft. Size 4 1/2 in.
Did Well Flow? - Reversed Out - Surface Choke Size 1 1/2 in. Bottom Choke Size 1 1/2 in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in.

Blow: Weak to fair blow throughout test.

Recovered 60 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 11:50 -A.M. Time Started Off Bottom 3:50 -P.M. Maximum Temperature 119°
Initial Hydrostatic Pressure (A) 2366 P.S.I.
Initial Flow Period Minutes 60 (B) 111 * P.S.I. to (C) 107 P.S.I.
Initial Closed In Period Minutes 57 (D) 156 P.S.I.
Final Flow Period Minutes 50 (E) 138 * P.S.I. to (F) 81 P.S.I.
Final Closed In Period Minutes 54 (G) 116 P.S.I.
Final Hydrostatic Pressure (H) 2344 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 3/3/81 Recorder No. 11018 Capacity 4425 Test Ticket No. 9323
 Location 4346 Ft. Well Temperature 119 °F
 Clock No. -- Elevation --

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	2366 P.S.I.	11:50P	M
B First Initial Flow Pressure	111 * P.S.I.	60 Mins.	60 Mins.
C First Final Flow Pressure	107 P.S.I.	60 Mins.	57 Mins.
D Initial Closed-in Pressure	156 P.S.I.	60 Mins.	50 Mins.
E Second Initial Flow Pressure	138 * P.S.I.	60 Mins.	54 Mins.
F Second Final Flow Pressure	81 P.S.I.		
G Final Closed-in Pressure	116 P.S.I.		
H Final Hydrostatic Mud	2344 P.S.I.		

* PRESSURES QUESTIONABLE DUE TO PLUGGING.

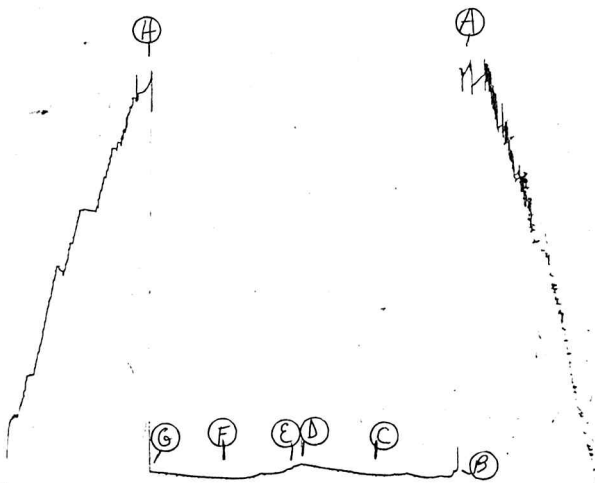
PRESSURE BREAKDOWN

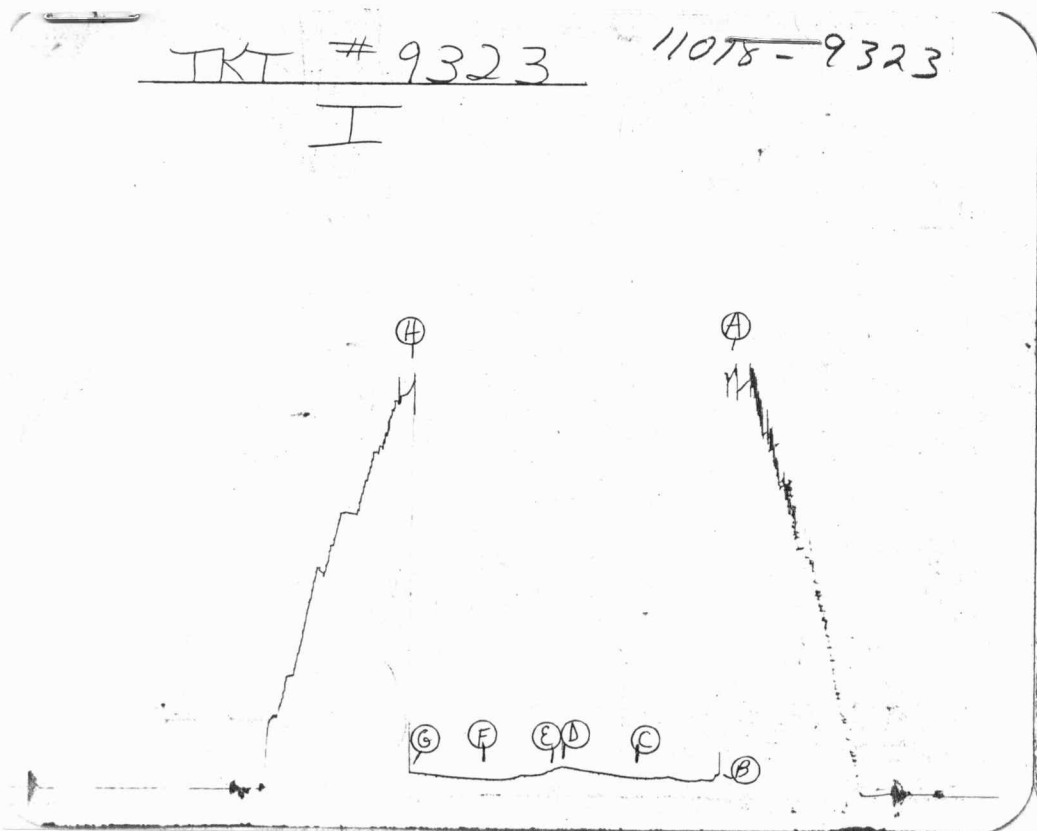
First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In		
Breakdown: <u>12</u> Inc.		Breakdown: <u>19</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>18</u> Inc.		
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a		
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	
P 1	0	111*	0	107	0	138*	0	81
P 2	5	87 *	3	97	5	124*	3	82
P 3	10	86 *	6	97	10	107*	6	83
P 4	15	83 *	9	101	15	103*	9	84
P 5	20	80 *	12	102	20	103*	12	85
P 6	25	80 *	15	107	25	96 *	15	87
P 7	30	87 *	18	111	30	84 *	18	89
P 8	35	98 *	21	116	35	80	21	91
P 9	40	98 *	24	119	40	79	24	93
P10	45	98 *	27	121	45	79	27	95
P11	50	92 *	30	124	50	81	30	97
P12	55	93	33	127			33	100
P13	60	107	36	131			36	103
P14			39	133			39	105
P15			42	138			42	107
P16			45	144			45	109
P17			48	149			48	111
P18			51	151			51	112
P19			54	155			54	116
P20			57	156				

TKT # 9323

11018-9323

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This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	2366	2366 PSI
(B) First Initial Flow Pressure	66	111 *SI
(C) First Final Flow Pressure	77	107 PSI
(D) Initial Closed-in Pressure	144	156 PSI
(E) Second Initial Flow Pressure	100	138 *SI
(F) Second Final Flow Pressure	77	81 PSI
(G) Final Closed-in Pressure	100	116 PSI
(H) Final Hydrostatic Mud	2344	2344 PSI

Company Pan Western Petroleum, Inc. Lease & Well No. Peters "B" #1
Elevation - Formation Mississippi Effective Pay - Ft. Ticket No. 9324
Date 3/3/81 Sec. 14 Twp. 27S Range 14W County Pratt State Kansas
Test Approved by Toby Elster Western Representative Stuart Stover

Formation Test No. 3 Interval Tested from 4403 ft. to 4445 ft. Total Depth 4445 ft.

Packer Depth 4398 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4403 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4408 ft. Recorder Number 11018 Cap. 4425

Bottom Recorder Depth (Outside) 4445 ft. Recorder Number 11019 Cap. 4500

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Ramco Rig #3 Drill Collar Length 60 I. D. 2 1/4 in.

Mud Type - Viscosity - Weight Pipe Length - I. D. - in.

Weight - Water Loss - cc. Drill Pipe Length - I. D. 4.0 in.

Chlorides - P.P.M. Test Tool Length 25 ft. Tool Size 3 1/2 in.

Jars: Make WTC Serial Number 414 Anchor Length 42 ft. Size 4 1/2 in.

Did Well Flow? - Reversed Out - Surface Choke Size 1/2 in. Bottom Choke Size 1/2 in.

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

Blow: Weak increasing to good.

Recovered 120 ft. of gas cut mud

Recovered 180 ft. of oil & gas cut mud

Recovered 115 ft. of heavy oil & gas cut mud

Recovered 5 ft. of muddy water

Recovered - ft. of -

Remarks: Slid tool 15' to bottom

Time Set Packer(s) 9:00 ~~A.M.~~ P.M. Time Started Off Bottom 1:00 ~~A.M.~~ P.M. Maximum Temperature 121

Initial Hydrostatic Pressure (A) 2288 P.S.I.

Initial Flow Period Minutes 60 (B) 239* P.S.I. to (C) 198 P.S.I.

Initial Closed In Period Minutes 57 (D) 1414 P.S.I.

Final Flow Period Minutes 55 (E) 227 P.S.I. to (F) 218 P.S.I.

Final Closed In Period Minutes 51 (G) 1350 P.S.I.

Final Hydrostatic Pressure (H) 2222 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 3/3/81 Recorder No. 11018 Capacity 4425 Test Ticket No. 9324 Location 4408 Ft.
 Clock No. - Elevation - Well Temperature 121 °F

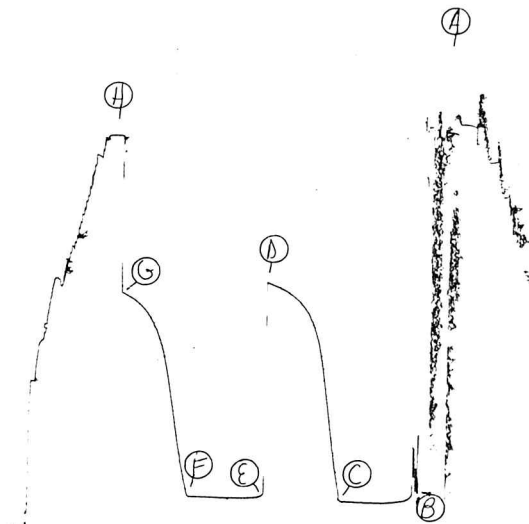
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2288	P.S.I.	9:00P	M
B First Initial Flow Pressure	239*	P.S.I.	60	Mins. 60
C First Final Flow Pressure	198	P.S.I.	60	Mins. 57
D Initial Closed-in Pressure	1414	P.S.I.	60	Mins. 55
E Second Initial Flow Pressure	227	P.S.I.	60	Mins. 51
F Second Final Flow Pressure	218	P.S.I.		
G Final Closed-in Pressure	1350	P.S.I.		
H Final Hydrostatic Mud	2222	P.S.I.		

*Pressures questionable due to plugging action

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>12</u> Inc.		Breakdown: <u>19</u> Inc.		Breakdown: <u>11</u> Inc.		Breakdown: <u>17</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	239*	0	198	0	227	0	218
P 2 5	239*	3	333	5	218	3	311
P 3 10	209	6	493	10	213	6	440
P 4 15	200	9	679	15	212	9	573
P 5 20	196	12	858	20	212	12	730
P 6 25	193	15	1000	25	212	15	883
P 7 30	193	18	1104	30	212	18	998
P 8 35	193	21	1176	35	213	21	1084
P 9 40	193	24	1229	40	215	24	1148
P10 45	195	27	1264	45	216	27	1192
P11 50	197	30	1295	50	217	30	1231
P12 55	198	33	1319	55	218	33	1260
P13 60	198	36	1339			36	1284
P14		39	1359			39	1304
P15		42	1373			42	1324
P16		45	1383			45	1335
P17		48	1394			48	1346
P18		51	1403			51	1350
P19		54	1413				
P20		57	1414				

TKT # 9324 11018-9324
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WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 9324

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation _____ Formation _____ Eff. Pay _____ Ft. _____

District Platt Date 3-3-81 Customer Order No. _____

COMPANY NAME PAU WESTERN

ADDRESS _____

LEASE AND WELL NO. PETERS B-1 COUNTY Platt STATE Ne Sec. 14 Twp 27 Rge 14

Mail Invoice To _____ Co. Name _____ Address _____ No. Copies Requested Reg

Mail Charts To _____ Address _____ No. Copies Requested _____

Formation Test No. 3 Interval Tested from 4403 ft. to 4445 ft. Total Depth 4445 ft.

Packer Depth 4398 ft. Size 10 3/4 in. Packer Depth _____ ft. Size _____ in.

Packer Depth 4403 ft. Size 10 3/4 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4408 ft. Recorder Number 11018 Cap. 4425

Bottom Recorder Depth (Outside) 4445 ft. Recorder Number 11019 Cap. 4500

Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor RAMCO #3 Drill Collar Length 60 I. D. 2 1/4 in.

Mud Type _____ Viscosity _____ Weight Pipe Length _____ I. D. _____ in.

Weight _____ Water Loss _____ cc. Drill Pipe Length _____ I. D. 4.0 in.

Chlorides _____ P.P.M. Test Tool Length 25 ft. Tool Size 3 1/2 in.

Jars: Make WTC Serial Number _____ Anchor Length 42 ft. Size 4 1/2 in.

Did Well Flow? _____ Reversed Out _____ Surface Choke Size 1/2 in. Bottom Choke Size 1/2 in.

Main Hole Size 2 1/8 in. Tool Joint Size 4 1/2 x 14 in.

Blow: Weak increasing to 6000

Recovered 120 ft. of Gas Cut mud

Recovered 180 ft. of Oil & Gas Cut mud

Recovered 115 ft. of Heavy oil & Gas Cut mud

Recovered 5 ft. of Muddy water

Remarks: Slid Tool 15' to Bottom

Time On Location 5:00 A.M. Time Pick Up Tool 6:00 A.M. Time Off Location _____ A.M.

Time Set Packer(s) 9:00 P.M. Time Started Off Bottom 100 P.M. Maximum Temperature 121°

Initial Hydrostatic Pressure _____ (A) 2288 P.S.I.

Initial Flow Period _____ Minutes 60 (B) 200 P.S.I. to (C) 177 P.S.I.

Initial Closed In Period _____ Minutes 60 (D) 1394 P.S.I.

Final Flow Period _____ Minutes 60 (E) 211 P.S.I. to (F) 211 P.S.I.

Final Closed In Period _____ Minutes 60 (G) 1339 P.S.I.

Final Hydrostatic Pressure _____ (H) 2211 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to 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, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By _____
Signature of Customer or his authorized representative

Western Representative Stuart Stover

FIELD INVOICE

Open Hole Test \$ ✓
Misrun \$ _____
Straddle Test \$ _____
Jars \$ ✓
Selective Zone \$ _____
Safety Joint \$ _____
Standby \$ _____
Evaluation \$ _____
Extra Packer \$ _____
Circ. Sub. \$ _____
Mileage \$ _____
Fluid Sampler \$ _____
Extra Charts \$ _____
Insurance \$ _____
TOTAL \$ ✓