

Company Associated Petroleum Consultants, Inc. Lease & Well No. #2-1 Z Bar Ranch
Elevation 1560 Kelly Bushing Formation Mississippi Effective Pay -- Ft. Ticket No. 18318
Date 12/3/82 Sec. 1 Twp. 35S Range 15W County Barber State Kansas
Test Approved by Phillip Harges Western Representative Rod Tritt

Formation Test No. 1 Interval Tested from 4897 ft. to 4945 ft. Total Depth 4945 ft.

Packer Depth 4892 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4897 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set =

Top Recorder Depth (Inside) 4801 ft. Recorder Number 2606 Cap. 4150

Bottom Recorder Depth (Outside) 4804 ft. Recorder Number 4332 Cap. 4200

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

Drilling Contractor Heartland Drilling Drill Collar Length 462 I. D. 2 1/4 in.

Mud Type chemical Viscosity 48 Weight Pipe Length - I. D. - in.

Weight 9.2 Water Loss 12.9 cc. Drill Pipe Length 4415 I. D. 3.8 in.

Chlorides 10,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make - Serial Number - Anchor Length 48 ft. Size 5 1/2 OD in.

Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

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

Blow: Strong blow; gas to surface in five minutes on initial flow period. See attached sheet for gas measurements.

Recovered 240 ft. of gassy oil cut mud 5% oil; 15% gas; 80% mud

Recovered 1094 ft. of very gassy froggy oil

Recovered 650 ft. of free oil 27 Gravity

Recovered - ft. of -

Recovered - ft. of -

Remarks: Had trouble ar first seating packers - took on some mud.

Time Set Packer(s) 3:15 A.M. Time Started Off Bottom 7:15 A.M. Maximum Temperature 128°

Initial Hydrostatic Pressure (A) 2460 P.S.I.

Initial Flow Period Minutes 35 (B) 310 P.S.I. to (C) 340 P.S.I.

Initial Closed In Period Minutes 63 (D) 1588 P.S.I.

Final Flow Period Minutes 55 (E) 407 P.S.I. to (F) 500 P.S.I.

Final Closed In Period Minutes 90 (G) 1560 P.S.I.

Final Hydrostatic Pressure (H) 2416 P.S.I.

GAS FLOW REPORT

Date 12/3/82 Ticket 18318 Company Associated Petroleum Consultants, Inc.
 Well Name and No. #2-1 Z Bar Ranch Dst No. 1 Interval Tested 4897'-4945'
 County Barber State Kansas Sec. 1 Twp. 35S Rg. 15W

Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow
PRE FLOW					
5 min		1" orifice			Gas to surface
10 min	24" of water	1" orifice			126,000 CFPD
20 min	20" of water	1" orifice			115,000 CFPD
30 min.	15" of water	1" orifice			101,000 CFPD

SECOND FLOW

10 min.	46" of water	1" orifice			175,000 CFPD
20 min	40" of water	1" orifice			163,000 CFPD
30 min	36" of water	1" orifice			155,000 CFPD
40 min	30" of water	1" orifice			141,000 CFPD
50 min	30" of water	1" orifice			141,000 CFPD
60 min	30" of water	1" orifice			141,000 CFPD

GAS BOTTLE

Serial No. ---- Date Bottle Filled --- Date to be Invoiced 12/3/82

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1 1/2% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME Associated Petroleum Consultants, Inc.

Authorized by Phillip Harges

WESTERN TESTING CO., INC.

Pressure Data

Date 12/3/82 Recorder No. 2606 Capacity 4150 Test Ticket No. 18318
 Clock No. -- Elevation 1560 Kelly Bushing Location 4801 Ft. --
 Well Temperature 128 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2460 P.S.I.	Open Tool	3:15A	M
B First Initial Flow Pressure	310 P.S.I.	First Flow Pressure	30 Mins.	35 Mins.
C First Final Flow Pressure	340 P.S.I.	Initial Closed-in Pressure	60 Mins.	63 Mins.
D Initial Closed-in Pressure	1588 P.S.I.	Second Flow Pressure	60 Mins.	55 Mins.
E Second Initial Flow Pressure	407 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F Second Final Flow Pressure	500 P.S.I.			
G Final Closed-in Pressure	1560 P.S.I.			
H Final Hydrostatic Mud	2416 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>7</u> Inc.		Breakdown: <u>21</u> Inc.		Breakdown: <u>11</u> Inc.		Breakdown: <u>30</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>310</u>	<u>0</u>	<u>340</u>	<u>0</u>	<u>407</u>	<u>0</u>	<u>500</u>
P 2 <u>5</u>	<u>310</u>	<u>3</u>	<u>1024</u>	<u>5</u>	<u>407</u>	<u>3</u>	<u>1025</u>
P 3 <u>10</u>	<u>310</u>	<u>6</u>	<u>1271</u>	<u>10</u>	<u>407</u>	<u>6</u>	<u>1232</u>
P 4 <u>15</u>	<u>310</u>	<u>9</u>	<u>1392</u>	<u>15</u>	<u>413</u>	<u>9</u>	<u>1328</u>
P 5 <u>20</u>	<u>315</u>	<u>12</u>	<u>1454</u>	<u>20</u>	<u>423</u>	<u>12</u>	<u>1383</u>
P 6 <u>25</u>	<u>322</u>	<u>15</u>	<u>1487</u>	<u>25</u>	<u>436</u>	<u>15</u>	<u>1414</u>
P 7 <u>30</u>	<u>333</u>	<u>18</u>	<u>1508</u>	<u>30</u>	<u>448</u>	<u>18</u>	<u>1435</u>
P 8 <u>35</u>	<u>340</u>	<u>21</u>	<u>1524</u>	<u>35</u>	<u>457</u>	<u>21</u>	<u>1453</u>
P 9		<u>24</u>	<u>1538</u>	<u>40</u>	<u>469</u>	<u>24</u>	<u>1465</u>
P10		<u>27</u>	<u>1547</u>	<u>45</u>	<u>478</u>	<u>27</u>	<u>1477</u>
P11		<u>30</u>	<u>1556</u>	<u>50</u>	<u>490</u>	<u>30</u>	<u>1488</u>
P12		<u>33</u>	<u>1561</u>	<u>55</u>	<u>500</u>	<u>33</u>	<u>1495</u>
P13		<u>36</u>	<u>1566</u>			<u>36</u>	<u>1501</u>
P14		<u>39</u>	<u>1571</u>			<u>39</u>	<u>1507</u>
P15		<u>42</u>	<u>1575</u>			<u>42</u>	<u>1513</u>
P16		<u>45</u>	<u>1579</u>			<u>45</u>	<u>1519</u>
P17		<u>48</u>	<u>1581</u>			<u>48</u>	<u>1523</u>
P18		<u>51</u>	<u>1583</u>			<u>51</u>	<u>1527</u>
P19		<u>54</u>	<u>1585</u>			<u>54</u>	<u>1531</u>
P20		<u>57</u>	<u>1586</u>			<u>57</u>	<u>1535</u>
		<u>60</u>	<u>1587</u>			<u>60</u>	<u>1538</u>
		<u>63</u>	<u>1588</u>				

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Recorder No. 2606 Capacity 4150 Location 4801 Ft.
Clock No. -- Elevation 1560 Kelly Bushing Well Temperature 128 °F

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D Initial Closed-in Pressure	<u>1588</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>55</u> Mins.
E Second Initial Flow Pressure	<u>407</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>500</u> P.S.I.			
G Final Closed-in Pressure	<u>1560</u> P.S.I.			
H Final Hydrostatic Mud	<u>2416</u> P.S.I.			

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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						63	1541
P 2						66	1544
P 3						69	1546
P 4						72	1548
P 5						75	1550
P 6						78	1552
P 7						81	1554
P 8						84	1556
P 9						87	1558
P10						90	1560
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

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