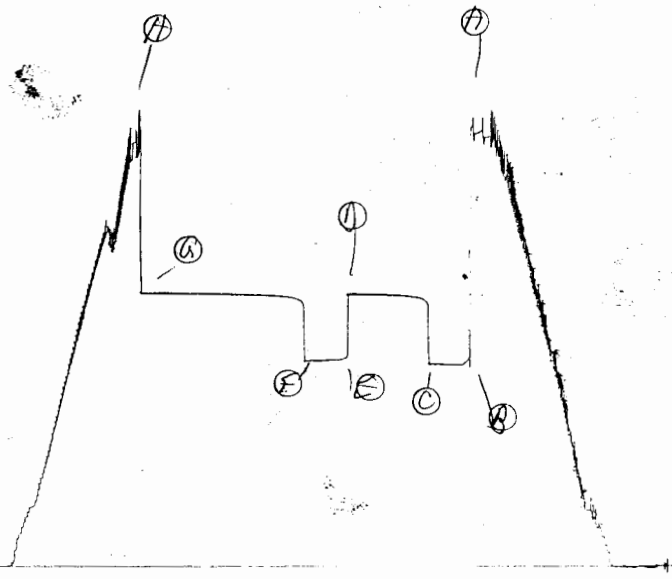


JKT 20487

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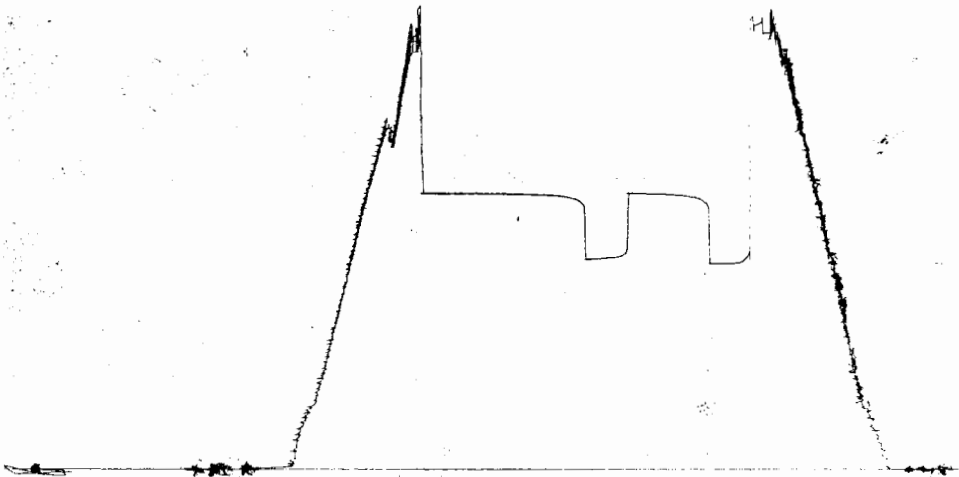
DST#1
10242



DKT 10487

DST#1
13266

0





WESTERN TESTING CO., INC. INFORMATION TESTING

Turkey. TICKET NO 20487

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

Elevation 3505 Formation Morrow Sand Eff. Pay Ft.

District Garden City Date 8-25-93 Customer Order No.

COMPANY NAME H & L Operating Co. ADDRESS Box 7506 Amarillo TX. 79114-7506 LEASE AND WELL NO. Puckett 1-6 COUNTY Morton STATE KS Sec. 6 Twp. 35s Rge. 41w Mail Invoice To H & L Operating Co. Co. Name SAME Address SAME No. Copies Requested Reg Mail Charts To SAME Address SAME No. Copies Requested Reg

Formation Test No. 1 Interval Tested From 4750 ft. to 4770 ft. Total Depth 4770 ft. Packer Depth 4745 ft. Size 6 5/8 in. Packer Depth - ft. Size - in. Packer Depth 4750 ft. Size 6 5/8 in. Packer Depth - ft. Size - in. Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4761 ft. Recorder Number 10242 Cap. 4100 Bottom Recorder Depth (Outside) 4764 ft. Recorder Number 13266 Cap. 4000 Below Straddle Recorder Depth - ft. Recorder Number - Cap. - Drilling Contractor Morton #22 Drill Collar Length 594 I. D. 2 1/4 in. Mud Type Chem. Viscosity 50 Weight Pipe Length - I. D. - Weight 9.2 Water Loss 9.9 cc. Drill Pipe Length 4124 I. D. 3.8 in. Chlorides 900 P.P.M. Test Tool Length 32 ft. Tool Size 5 1/2 in. Jars: Make W.T.C. Serial Number 415 Anchor Length 20 ft. Size 5 1/2 in. Did Well Flow? yes 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 x 1 1/4 in.

Blow: Stronb. B.O.B. Immediately G.T.S. 1 min see flow chart I.F. see flow chart F.F.

Recovered 1 ft. of condensate Recovered - ft. of Recovered - ft. of Recovered - ft. of Recovered - ft. of Recovered - ft. of Chlorides - P.P.M. Sample Jars used - Remarks:

Time On Location 9:45 AM Time Pick Up Tool 12:15 AM Time Off Location - AM P.M. Time Set Packer(s) 2:07 AM Time Started Off Bottom 6:07 AM Maximum Temperature 124°F Initial Hydrostatic Pressure (A) 2462 P.S.I. Initial Flow Period 30 Minutes (B) 1167 P.S.I. to (C) 1132 P.S.I. Initial Closed In Period 60 Minutes (D) 1514 P.S.I. Final Flow Period 30 Minutes (E) 1167 P.S.I. to (F) 1154 P.S.I. Final Closed In Period 120 Minutes (G) 1517 P.S.I. Final Hydrostatic Pressure (H) 2465 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] Signature of Customer or his authorized representative Western Representative [Signature]

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 \$ Telecopier \$ TOTAL \$



Nº 1154

GAS FLOW REPORT

Date 8-25-93 Ticket 20487 Company H&L operating Co
 Well Name and No. Puckett 1-6 Dst No. 1 Interval Tested 4750-4770
 County Morton State KS Sec. 6 Twp. 553 Rg. 4/W

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
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PRE FLOW

G.T.S. l/min

Time	P.S.I.	Size of Orifice	P.S.I.	P.S.I.	Description
5	54 70	1 1/2			3,991,000 MC FPD
10	70	"			4,946,000
15	72	"			5,065,000
20	"	"			" "
25	"	"			" "
30	70	"			4,946,000

SECOND FLOW

Time	P.S.I.	Size of Orifice	P.S.I.	P.S.I.	Description
5	68	1 1/2			4,827,000 MC FPD
10	78	"			5,304,000 Blowing mist of mud
15	78	"			5,424,000 " " "
20	"	"			" " "
25	80	"			5,543,000 Blowing mist of mud & oil
30	78	"			5,424,000 " " " & condensate

GAS BOTTLE

Serial No. _____ Date Bottle Filled _____ Date to be Invoiced _____

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 H&L op
 Authorized by [Signature]

WESTERN TESTING CO., INC.

Pressure Data

Date: 8-25-93 Test Ticket No: 20487
 Recorder No: 10242 Capacity: _____ Location: _____ Fr.: _____
 Clock No: _____ Elevation: _____ Well Temperature: _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2401</u> P.S.I.		M
B First Initial Flow Pressure	<u>1149</u> P.S.I.	Mins. <u>20</u>	Mins.
C First Final Flow Pressure	<u>1145</u> P.S.I.	Mins. <u>100</u>	Mins.
D Initial Closed-in Pressure	<u>1527</u> P.S.I.	Mins. <u>30</u>	Mins.
E Second Initial Flow Pressure	<u>1169</u> P.S.I.	Mins. <u>20</u>	Mins.
F Second Final Flow Pressure	<u>1169</u> P.S.I.		
G Final Closed-in Pressure	<u>1527</u> P.S.I.		
H Final Hydrostatic Mud	<u>2337</u> P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ 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	<u>1149</u>	0	<u>1145</u>	0	<u>1169</u>	0	<u>1169</u>
P 2 5	<u>1145</u>	3	<u>1469</u>	5		3	<u>1455</u>
P 3 10	<u>1145</u>	6	<u>1497</u>	10		6	<u>1487</u>
P 4 15	<u>1145</u>	9	<u>1503</u>	15		9	<u>1476</u>
P 5 20		12	<u>1505</u>	20		12	<u>1501</u>
P 6 25		15	<u>1511</u>	25		15	<u>1506</u>
P 7 30	<u>1145</u>	18	<u>1514</u>	30	<u>1169</u>	18	<u>1509</u>
P 8 35		21	<u>1516</u>	35		21	<u>1511</u>
P 9 40		24	<u>1517</u>	40		24	<u>1513</u>
P10 45		27	<u>1518</u>	45		27	<u>1514</u>
P11 50		30	<u>1519</u>	50		30	<u>1515</u>
P12 55		33	<u>1520</u>	55		33	<u>1516</u>
P13 60		36	<u>1521</u>	60		36	<u>1517</u>
P14 65		39	<u>1522</u>	65		39	<u>1518</u>
P15 70		42	<u>1523</u>	70		42	<u>1519</u>
P16 75		45	<u>1524</u>	75		45	<u>1520</u>
P17 80		48	<u>1525</u>	80		48	<u>1521</u>
P18 85		51	<u>1526</u>	85		51	<u>1522</u>
P19 90		54	<u>1527</u>	90		54	<u>1523</u>
P20 95		57		95		57	<u>1524</u>
100		60	<u>1527</u>	100		60	<u>1524</u>

WESTERN TESTING CO., INC.

Pressure Data

Date _____

Test Ticket No. 20487

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Open Tool	Time Given	Time Computed
A	Initial Hydrostatic Mud _____ P.S.I.	_____	_____	_____ M.
B	First Initial Flow Pressure _____ P.S.I.	First Flow Pressure _____	_____	_____ Mins. _____ Mins.
C	First Final Flow Pressure _____ P.S.I.	Initial Closed-in Pressure _____	_____	_____ Mins. _____ Mins.
D	Initial Closed-in Pressure _____ P.S.I.	Second Flow Pressure _____	_____	_____ Mins. _____ Mins.
E	Second Initial Flow Pressure _____ P.S.I.	Final Closed-in Pressure _____	_____	_____ Mins. _____ Mins.
F	Second Final Flow Pressure _____ P.S.I.			
G	Final Closed-in Pressure _____ P.S.I.			
H	Final Hydrostatic Mud _____ P.S.I.			

PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In
	Breakdown: _____ Inc. of _____ mins. and a final inc. of _____ Min.	Breakdown: _____ Inc. of _____ mins. and a final inc. of _____ Min.	Breakdown: _____ Inc. of _____ mins. and a final inc. of _____ Min.	Breakdown: _____ Inc. of _____ mins. and a final inc. of _____ Min.
	Point Minutes	Point Minutes	Point Minutes	Point Minutes
P 1	105	63	105	63
P 2	110	66	110	66
P 3	115	69	115	69
P 4	120	72	120	72
P 5	125	75	125	75
P 6	130	78	130	78
P 7	135	81	135	81
P 8	140	84	140	84
P 9	145	87	145	87
P10	150	90	150	90
P11	155	93	155	93
P12	160	96	160	96
P13	165	99	165	99
P14	170	102	170	102
P15	175	105	175	105
P16	180	108	180	108
P17	185	111	185	111
P18	190	114	190	114
P19	195	117	195	117
P20	200	120	200	120

DST REPORT

GENERAL INFORMATION

DATE : 8/25/93	TICKET : 20487
CUSTOMER : H & L OPERATING COMPANY	LEASE : PUCKETT
WELL : #1-6 TEST: 1	GEOLOGIST: ?
ELEVATION: 3505	FORMATION: MORROW SAND
SECTION : 6	TOWNSHIP : 35S
RANGE : 41W COUNTY: MORTON	STATE : KS
GAUGE SN#: 10242 RANGE : 4100	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 4750.00 ft	TO: 4770.00 ft	TVD: 4770.0 ft
DEPTH OF SELECTIVE ZONE:	TEST TYPE: GAS	
DEPTH OF RECORDERS: 4761.0 ft	4764.0 ft	
TEMPERATURE: 124.0		
DRILL COLLAR LENGTH: 594.0 ft	I.D.:	2.250 in
WEIGHT PIPE LENGTH : 0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH : 4124.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH : 32.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH : 20.0 ft	ANCHOR SIZE:	5.500 in
SURFACE CHOKE SIZE : 0.750 in	BOTTOM CHOKE SIZE:	0.750 in
MAIN HOLE SIZE : 7.875 in	TOOL JOINT SIZE :	4.5XH
PACKER DEPTH: 4745.0 ft	SIZE:	6.630 in
PACKER DEPTH: 4750.0 ft	SIZE:	6.630 in
PACKER DEPTH: 0.0 ft	SIZE:	0.000 in
PACKER DEPTH: 0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON. : MURFIN RIG 22	
MUD TYPE : CHEMICAL	VISCOSITY : 50.00 cp
WEIGHT : 9.200 ppg	WATER LOSS: 9.900 cc
CHLORIDES : 900 ppm	
JARS-MAKE : WTC	SERIAL NUMBER: 415
DID WELL FLOW?: YES	REVERSED OUT?: NO

COMMENTS

Comment

INITIAL AND FINAL FLOW PERIODS STRONG BLOW -
 BOTTOM OF BUCKET IMMEDIATELY. GAS TO SURFACE IN 1
 MINUTE INITIAL FLOW PERIOD - SEE GAS SHEET

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

ATTACHED.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
1.0	0.0	100.0	0.0	0.0	CONDENSATE

RATE INFORMATION

OIL VOLUME:	0.0000	STB	
GAS VOLUME:	0.0276	SCF	
MUD VOLUME:	0.0000	STB	
WATER VOLUME:	0.0000	STB	
TOTAL FLUID :	0.0000	STB	
			TOTAL FLOW TIME: 60.0000 min.
			AVERAGE OIL RATE: 0.0000 STB/D
			AVERAGE WATER RATE: 0.0000 STB/D

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2462.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	1167.00	1132.00
INITIAL SHUT-IN	60.00		1514.00
FINAL FLOW	30.00	1167.00	1154.00
FINAL SHUT-IN	120.00		1517.00

FINAL HYDROSTATIC PRESSURE: 2465.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2401.00

<u>Description</u>	<u>Duration</u>	<u>p1</u>	<u>p End</u>
INITIAL FLOW	30.00	1149.00	1145.00
INITIAL SHUT-IN	60.00		1527.00
FINAL FLOW	30.00	1169.00	1169.00
FINAL SHUT-IN	120.00		1527.00

FINAL HYDROSTATIC PRESSURE: 2377.00

GAS FLOW REPORT

GENERAL INFORMATION

DATE : 8/25/93	TICKET : 20487
CUSTOMER : H & L OPERATING COMPANY	LEASE : PUCKETT
WELL : #1-6	TEST: 1
ELEVATION: 3505	GEOLOGIST: ?
SECTION : 6	FORMATION: MORROW SAND
RANGE : 41W	TOWNSHIP : 35S
COUNTY: MORTON	STATE : KS
GAUGE SN#: 10242	RANGE : 4100
	CLOCK : 12

PRE FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
5 MIN	MERLA	1.500	54 PSIG	3991000 SCF/D
10 MIN	MERLA	1.500	70 PSIG	4946000 SCF/D
15 MIN	MERLA	1.500	72 PSIG	5065000 SCF/D
20 MIN	MERLA	1.500	72 PSIG	5065000 SCF/D
25 MIN	MERLA	1.500	72 PSIG	5065000 SCF/D
30 MIN	MERLA	1.500	70 PSIG	4946000 SCF/D

SECOND FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
5 MIN	MERLA	1.500	68 PSIG	4827000 SCF/D
10 MIN	MERLA	1.500	76 PSIG	5304000 SCF/D
15 MIN	MERLA	1.500	78 PSIG	5424000 SCF/D
20 MIN	MERLA	1.500	78 PSIG	5424000 SCF/D
25 MIN	MERLA	1.500	80 PSIG	5543000 SCF/D
30 MIN	MERLA	1.500	78 PSIG	5424000 SCF/D

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 8/25/93	TICKET	: 20487
CUSTOMER	: H & L OPERATING COMPANY	LEASE	: PUCKETT
WELL	: #1-6	TEST:	1
ELEVATION:	3505	GEOLOGIST:	?
SECTION	: 6	FORMATION:	MORROW SAND
RANGE	: 41W	TOWNSHIP	: 35S
GAUGE SN#:	10242	STATE	: KS
		CLOCK	: 12
		COUNTY:	MORTON
		RANGE	: 4100

INITIAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	1149.00	1149.00
5.00	1145.00	-4.00
10.00	1145.00	0.00
15.00	1145.00	0.00
20.00	1145.00	0.00
25.00	1145.00	0.00
30.00	1145.00	0.00

INITIAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	1467.00	1467.00	0.00
6.00	1497.00	30.00	0.00
9.00	1503.00	6.00	0.00
12.00	1505.00	2.00	0.00
15.00	1511.00	6.00	0.00
18.00	1514.00	3.00	0.00
21.00	1516.00	2.00	0.00
24.00	1517.00	1.00	0.00
27.00	1518.00	1.00	0.00
30.00	1519.00	1.00	0.00
33.00	1520.00	1.00	0.00
36.00	1521.00	1.00	0.00
39.00	1522.00	1.00	0.00
42.00	1523.00	1.00	0.00
45.00	1524.00	1.00	0.00
48.00	1525.00	1.00	0.00
51.00	1526.00	1.00	0.00
54.00	1527.00	1.00	0.00
57.00	1527.00	0.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

INITIAL SHUT IN (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
60.00	1527.00	0.00	0.00

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	1169.00	1169.00
5.00	1169.00	0.00
10.00	1169.00	0.00
15.00	1169.00	0.00
20.00	1169.00	0.00
25.00	1169.00	0.00
30.00	1169.00	0.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	1455.00	1455.00	0.00
6.00	1487.00	32.00	0.00
9.00	1496.00	9.00	0.00
12.00	1501.00	5.00	0.00
15.00	1506.00	5.00	0.00
18.00	1509.00	3.00	0.00
21.00	1511.00	2.00	0.00
24.00	1513.00	2.00	0.00
27.00	1514.00	1.00	0.00
30.00	1515.00	1.00	0.00
33.00	1516.00	1.00	0.00
36.00	1517.00	1.00	0.00
39.00	1518.00	1.00	0.00
42.00	1519.00	1.00	0.00
45.00	1520.00	1.00	0.00
48.00	1521.00	1.00	0.00
51.00	1522.00	1.00	0.00
54.00	1523.00	1.00	0.00
57.00	1524.00	1.00	0.00
60.00	1524.00	0.00	0.00
63.00	1524.00	0.00	0.00
66.00	1525.00	1.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
69.00	1525.00	0.00	0.00
72.00	1525.00	0.00	0.00
75.00	1525.00	0.00	0.00
78.00	1526.00	1.00	0.00
81.00	1526.00	0.00	0.00
84.00	1526.00	0.00	0.00
87.00	1526.00	0.00	0.00
90.00	1526.00	0.00	0.00
93.00	1527.00	1.00	0.00
96.00	1527.00	0.00	0.00
99.00	1527.00	0.00	0.00
102.00	1527.00	0.00	0.00
105.00	1527.00	0.00	0.00
108.00	1527.00	0.00	0.00
111.00	1527.00	0.00	0.00
114.00	1527.00	0.00	0.00
117.00	1527.00	0.00	0.00
120.00	1527.00	0.00	0.00