

MUST BE TYPED

RECEIVED SIDE ONE

ORIGINAL

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACD-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

KANSAS CORPORATION COMMISSION

APR NO. 15- 185-23045 0000

SEP 09 1997

County Stafford County, Kansas

NE - NE - NE - Sec. 15 Twp. 25S Rge. 11 XX ^E

Operator: License # 3180 CONSERVATION DIVISION
WICHITA, KS

330 Feet from S (circle one) Line of Section
330 Feet from W (circle one) Line of Section

Name: Deutsch Oil Company
Address 107 North Market - Suite 1115

Footages Calculated from Nearest Outside Section Corner:
SE SE, NW or SW (circle one)

City/State/Zip Wichita, Kansas 67202

Lease Name Cravens Well # 1-15

Purchaser: None as yet

Field Name _____

Operator Contact Person: Kent Deutsch

Producing Formation Viola

Phone (316) 267-7551

Elevation: Ground 1800' KB 1808'

Contractor: Name: Duke Drilling Co., Inc.

Total Depth 4100' PSTD 4200'

License: 5929

Amount of Surface Pipe Set and Cemented at 259' Feet

Wellsite Geologist: Kent Deutsch

Multiple Stage Cementing Collar Used? Yes X No

Designate Type of Completion
X New Well _____ Re-Entry _____ Workover _____

If yes, show depth set _____ Feet

_____ Oil _____ SWD _____ STOW _____ Temp. Abd.
_____ Gas _____ ENHR XXX _____ SIGV
_____ Dry _____ Other (Core, WSW, Expl., Cathodic, etc)

If Alternate II completion, cement circulated from _____

feet depth to _____ w/ _____ sx cat.

If Workover/Re-Entry: old well info as follows:

Drilling Fluid Management Plan ALT 1 JK 9-19-97
(Data must be collected from the Reserve Pit)

Operator: _____

Chloride content 32000 ppm Fluid volume 480 bbls

Well Name: _____

Dewatering method used Vac. Trk.

Comp. Date _____ Old Total Depth _____

Location of fluid disposal if hauled offsite:

_____ Deepening _____ Re-perf. _____ Conv. to Inj/SWD
_____ Plug Back _____ PSTD
_____ Commingled _____ Docket No. _____
_____ Dual Completion _____ Docket No. _____
_____ Other (SWD or Inj?) _____ Docket No. _____

Operator Name Bullseye Roustabout Service

Lease Name Clark License No. 31056

04-28-97 05-05-97 05-05-97
Spud Date Date Reached TD Completion Date

NW Quarter Sec. 10 Twp. 26 S Rng. 12 E/W

County Pratt Docket No. D21-405

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature _____
Title Owner Date 9/20/97

Subscribed and sworn to before me this 20th day of August, 19 97.

Notary Public: Daphne G. Starr

Date Commission Expires 10-1-97.

K.C.C. OFFICE USE ONLY		
F	<u>✓</u>	Letter of Confidentiality Attached
C	<u>✓</u>	Wireline Log Received
C	<u>✓</u>	Geologist Report Received
Distribution		
<u>✓</u>	KCC	_____ SWD/Rep _____ NGPA
_____	KES	_____ Plug _____ Other _____ (Specify)

Operator Name Deutsch Oil Company Lease Name Cravens Well # 1-15

Sec. 15 Twp. 25S Rge. 11 East West
 County Stafford County, Kansas

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken (Attach Additional Sheets.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Log	Formation (Top). Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Heebner	3244	-1440
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Lansing	3440	-1636
		Base K.C.	3738	-1934
		Viola	3852	-2048
		Simpson	3964	-2106
		Arbuckle	4037	-2233

List All E.Logs Run: Dual Induction
 Comp: Neutron Density

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (in O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12-1/4"	8-5/8"	20#	259'	60/40 Poz	185	3%cc 2%gel
Production	7-7/8"	5-1/2"	14#	4067'	65/35 Poz ASC	190 100	6% gel 5% KAL-SEAL

ADDITIONAL CEMENTING/SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type	Acid, Fracture, Shot, Cement Squeeze Record
	Specify Footage of Each Interval Perforated	(Amount and Kind of Material Used) Depth
1	3855-3580, 3887-3891	none

TUBING RECORD	Size 2 7/8"	Set At 3880	Packer At none	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SMD or Inj.	Producing Method <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)			
Estimated Production Per 24 Hours	Oil 0 Sbls.	Gas 2572 Mcf	Water 0 Sbls.	Gas-Oil Ratio Gravity

Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION: Open Hole Perf. Dually Comp. Commingled Other (Specify)

Production Interval: 3855-3891

ORIGINAL

ALLIED CEMENTING CO., INC. 7077

P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:

U/B

DATE <u>4-28-97</u>	SEC <u>15</u>	TWP <u>25</u>	RANGE <u>11</u>	CALLED OUT <u>11:30 AM</u>	ON LOCATION <u>6:30 AM</u>	JOB START <u>9:00 AM</u>	JOB FINISH <u>10:00 AM</u>
LEASE <u>Crawns</u>	WELL # <u>1-15</u>	LOCATION <u>Zenith 53 1/2 W 3/4</u>	COUNTY <u>St. Louis</u>	STATE <u>Mo.</u>			

~~OLD~~ OR NEW (Circle one)

CONTRACTOR <u>Duke Drilling Rig #1</u>
TYPE OF JOB <u>Surface pipe job</u>
HOLE SIZE <u>20"</u> T.D. <u>261 ft</u>
CASING SIZE <u>19 1/2"</u> DEPTH <u>260 ft</u>
TUBING SIZE _____ DEPTH _____
DRILL PIPE _____ DEPTH _____
TOOL _____ DEPTH _____
PRES. MAX <u>100'</u> MINIMUM _____
MEAS. LINE <u>245'</u> SHOE JOINT _____
CEMENT LEFT IN CSG. <u>15 ft</u>
PERFS. <u>Displacement 15.8 bbl</u>

OWNER <u>Same</u>
CEMENT
AMOUNT ORDERED <u>185 @ 3700 26 gal</u>

EQUIPMENT	
PUMP TRUCK # <u>120</u> CEMENTER <u>Mike m.</u>	
HELPER <u>Duane S.</u>	
BULK TRUCK # <u>342</u> DRIVER <u>Kevin R.</u>	
DRIVER _____	

COMMON <u>111</u> @ <u>6.10</u> <u>677.10</u>
POZMIX <u>74</u> @ <u>3.15</u> <u>233.10</u>
GEL <u>3</u> @ <u>9.50</u> <u>28.50</u>
CHLORIDE <u>6</u> @ <u>28.00</u> <u>168.00</u>
_____ @ _____ _____
_____ @ _____ _____
_____ @ _____ _____
_____ @ _____ _____
_____ @ _____ _____
_____ @ _____ _____
HANDLING <u>185</u> @ <u>1.05</u> <u>194.25</u>
MILEAGE <u>20</u> @ _____ <u>148.00</u>
TOTAL # <u>1448.95</u>

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KANSAS CORPORATION COMMISSION

SEP-09 1997

REMARKS:

CONSERVATION DIVISION
WICHITA, KS

SERVICE

Circulate the hole with Rig mud pump
dry cement + Release the plug
Displace plug down with water
Cement did circulate to surface

DEPTH OF JOB <u>260 ft</u>
PUMP TRUCK CHARGE <u>445.00</u>
EXTRA FOOTAGE @ _____
MILEAGE <u>20</u> @ <u>2.85</u> <u>57.00</u>
PLUG <u>1-3/8" wooden plug</u> @ <u>45.00</u> <u>45.00</u>
_____ @ _____ _____
_____ @ _____ _____

TOTAL \$ 547.00

CHARGE TO: Deutsch oil Co.
STREET 115 Bittling Bldg. 107 N. MARKET
CITY Wichita STATE Ks ZIP 67202

FLOAT EQUIPMENT

_____ @ _____
_____ @ _____
_____ @ _____
_____ @ _____
_____ @ _____
TOTAL _____

Thank you
Allied Cementing Co Inc
Mike + Duane + Kevin

TAX <u>-0-</u>
TOTAL CHARGE <u>1995.95</u>
DISCOUNT \$ <u>299.40</u> IF PAID IN 30 DAYS

Net \$ 1696.55

To Allied Cementing Co., Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

SIGNATURE Mike Godfrey

ALLIED CEMENTING CO., INC.

5535

10 P.O. BOX 31
RUSSELL, KANSAS 67665

ORIGINAL

SERVICE POINT:

At Bend

DATE <u>5-5-97</u>	SEC. <u>15</u>	TWP. <u>25</u>	RANGE <u>11</u>	CALLED OUT <u>7:00 AM.</u>	ON LOCATION <u>10:00 AM.</u>	JOB START <u>2:00 PM.</u>	JOB FINISH <u>3:30 PM.</u>
LEASE <u>CONTRACTS</u>	WELL# <u>1-15</u>	LOCATION <u>Zenith - 55, 1/2 W, 5/5</u>			COUNTY <u>Stafford</u>	STATE <u>Ka</u>	

OLD OR (NEW) (Circle one)

CONTRACTOR Boyle Rig #1

TYPE OF JOB Production

HOLE SIZE 7 7/8" T.D. 4100'

CASING SIZE 5 1/2" (used 14") DEPTH 4067'

TUBING SIZE _____ DEPTH _____

DRILL PIPE _____ DEPTH _____

TOOL _____ DEPTH _____

PRES. MAX 1500# MINIMUM _____

MEAS. LINE _____ SHOE JOINT 31.58'

CEMENT LEFT IN CSG. 31.58'

REMARKS. Drip = 98 1/2 bbls,

OWNER Same

CEMENT ALW

AMOUNT ORDERED 210 lbs (65/35 6% Hel) 28% Kol Seal

Per 100 lbs ASC, 5% Kol Seal

500 gal Mud Clean

COMMON	<u>100 ASC</u>	@	<u>7.85</u>	<u>785.00</u>
POZMIX	<u>210 ALW</u>	@	<u>5.65</u>	<u>1186.50</u>
GEL		@		
CHLORIDE		@		
Kol Seal	<u>920#</u>	@	<u>.38</u>	<u>349.60</u>
Mud Clean	<u>500 gal</u>	@	<u>.75</u>	<u>375.00</u>
		@		
		@		
		@		
HANDLING	<u>310</u>	@	<u>1.05</u>	<u>325.50</u>
MILEAGE	<u>30</u>			<u>248.00</u>

EQUIPMENT

PUMP TRUCK CEMENTER Tom D

181 HELPER Bob B

BULK TRUCK

341 DRIVER Rich W

BULK TRUCK

240 DRIVER Justin H

RECEIVED HANDLING
KANSAS CORPORATION COMMISSION

SEP 09 1997

TOTAL \$ 3269.60

REMARKS:

CONSERVATION DIVISION
WICHITA, KS

SERVICE

Ran 4067' of used 5 1/2" csg, Boyle Rig,
pumped 500 gal mud clean, mixed
185 lbs 65/35 6% Hel 28% Kol Seal followed by
100 lbs ASC 5% Kol Seal. Washed line
clean. Pumped blue with fresh water
float did hold.

100 lbs 65/35 6% Hel
100 lbs 65/35 6% Hel,

DEPTH OF JOB	<u>4067'</u>			
PUMP TRUCK CHARGE				<u>1090.00</u>
EXTRA FOOTAGE		@		
MILEAGE	<u>20</u>	@	<u>2.85</u>	<u>57.00</u>
PLUG	<u>1-5 1/2" Rubber</u>	@	<u>50.00</u>	<u>50.00</u>
		@		
		@		

TOTAL \$ 1197.00

CHARGE TO: Deutch Oil Co.

STREET 107 N. Market Suite 115 Bittin Bld.

CITY Wichita STATE Ka ZIP 67202

FLOAT EQUIPMENT

1-5 1/2" Guide Shoe	@	<u>168.00</u>	<u>168.00</u>
1-5 1/2" Insert	@	<u>263.00</u>	<u>263.00</u>
8-5 1/2" Centralizers	@	<u>56.00</u>	<u>448.00</u>
1-5 1/2" Buckets	@	<u>142.00</u>	<u>852.00</u>
1-5 1/2" Stop Ring	@	<u>20.00</u>	<u>20.00</u>

TOTAL \$ 1751.00

TAX -0-

TOTAL CHARGE \$ 6217.60

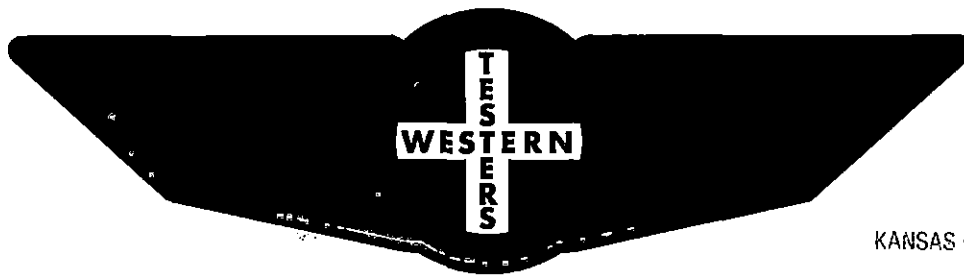
DISCOUNT \$ 932.64 IF PAID IN 30 DAYS

Net \$ 5284.96

To Allied Cementing Co., Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

SIGNATURE Gussey B. [Signature]

WESTERN TESTING CO., INC.



RECEIVED
KANSAS CORPORATION COMMISSION

Home Office: Wichita, Kansas 67201
P.O. Box 1599 Phone (316) 262-5861

SEP 29 1997

CONSERVATION DIVISION
WICHITA, KS

FORMATION TEST REPORT

DST REPORT

GENERAL INFORMATION

DATE : 5/2/97 TICKET : 21825
CUSTOMER : DEUTSCH OIL COMPANY LEASE : CRAVENS
WELL : #1-15 TEST: 1 GEOLOGIST: DEUTSCH
ELEVATION: 1804 KB FORMATION: L KANSAS CITY
SECTION : 15 TOWNSHIP : 25S
RANGE : 11W COUNTY: STAFFORD STATE : KS
GAUGE SN#: 11018 RANGE : 4425 CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3450.00 ft TO: 3492.00 ft TVD: 3492.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 3453.0 ft 3489.0 ft
TEMPERATURE: 106.0

DRILL COLLAR LENGTH: 0.0 ft I.D.: 0.000 in
WEIGHT PIPE LENGTH : 0.0 ft I.D.: 0.000 in
DRILL PIPE LENGTH : 3428.0 ft I.D.: 3.800 in
TEST TOOL LENGTH : 22.0 ft TOOL SIZE : 5.500 in
ANCHOR LENGTH : 42.0 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: 3445.0 ft SIZE: 6.630 in
PACKER DEPTH: 3450.0 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. : DUKE DRILLING RIG 1
MUD TYPE : CHEMICAL VISCOSITY : 44.00 cp
WEIGHT : 8.200 ppg WATER LOSS: 10.000 cc
CHLORIDES : 3000 ppm
JARS-MAKE : SERIAL NUMBER:
DID WELL FLOW?: NO REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK STEADY BLOW - 1/2 INCH.
FINAL FLOW PERIOD WEAK BLOW - DIED IN 20 MINUTES.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
15.0	0.2	0.0	0.0	99.8	OIL SPECKED MUD

RATE INFORMATION

OIL VOLUME:	0.0004 STB		TOTAL FLOW TIME:	60.0000 min.
GAS VOLUME:	0.0000 SCF		AVERAGE OIL RATE:	5.0495 STB/D
MUD VOLUME:	0.2100 STB		AVERAGE WATER RATE:	0.0000 STB/D
WATER VOLUME:	0.0000 STB			
TOTAL FLUID :	0.2104 STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1620.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	40.00	43.00
INITIAL SHUT-IN	45.00		188.00
FINAL FLOW	30.00	46.00	46.00
FINAL SHUT-IN	45.00		120.00

FINAL HYDROSTATIC PRESSURE: 1593.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1623.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	73.46	53.42
INITIAL SHUT-IN	45.00		183.96
FINAL FLOW	30.00	77.53	59.32
FINAL SHUT-IN	45.00		119.48

FINAL HYDROSTATIC PRESSURE: 1612.00

Company: DEUTSCH OIL COMPANY
Well: #1-15 CRAVENS
Field: TKT 21825 DST 1

[Friday: May. 2, 1997]
Page 1

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)

START FLOW 1				
1	0	11:51: 6	0.0000	73.46
10	0	11:52:11	0.0180	73.44
19	0	11:53:16	0.0359	70.64
28	0	11:54:20	0.0539	66.92
37	0	11:55:25	0.0719	64.12
46	0	11:56:30	0.0899	63.17
55	0	11:57:34	0.1079	63.15
64	0	11:58:39	0.1258	61.28
73	0	11:59:44	0.1438	61.26
82	0	12: 0:49	0.1618	59.39
91	0	12: 1:53	0.1798	59.36
100	0	12: 2:58	0.1978	59.34
109	0	12: 4: 3	0.2157	59.32
118	0	12: 5: 8	0.2337	58.37
127	0	12: 6:12	0.2517	57.43
136	0	12: 7:17	0.2697	56.48
145	0	12: 8:22	0.2877	56.46
154	0	12: 9:27	0.3056	56.44
163	0	12:10:31	0.3236	55.49
172	0	12:11:36	0.3416	55.47
181	0	12:12:41	0.3596	55.44
190	0	12:13:46	0.3776	55.42
199	0	12:14:50	0.3956	54.48
208	0	12:15:55	0.4135	53.53
217	0	12:17: 0	0.4315	53.51
226	0	12:18: 4	0.4495	53.48
235	0	12:19: 9	0.4675	53.46
244	0	12:20:14	0.4855	53.44
253	0	12:21:19	0.5035	53.42
END FLOW 1				
START SHUTIN 1				
257	0	12:21:47	0.5115	54.33
262	0	12:22:23	0.5214	54.32
271	0	12:23:28	0.5394	54.30
280	0	12:24:33	0.5574	54.28
289	0	12:25:38	0.5754	54.26
298	0	12:26:42	0.5934	54.23
307	0	12:27:47	0.6114	54.21
316	0	12:28:52	0.6294	54.19
325	0	12:29:57	0.6474	55.09
334	0	12:31: 1	0.6653	55.07
343	0	12:32: 6	0.6833	56.90
352	0	12:33:11	0.7013	56.88
361	0	12:34:16	0.7193	58.71
370	0	12:35:21	0.7373	58.68
379	0	12:36:25	0.7553	58.66
388	0	12:37:30	0.7733	60.49
397	0	12:38:35	0.7913	61.39
406	0	12:39:40	0.8093	61.37
415	0	12:40:44	0.8273	63.20
424	0	12:41:49	0.8452	64.10
433	0	12:42:54	0.8632	65.93
442	0	12:43:59	0.8812	67.76
451	0	12:45: 4	0.8992	71.44

WESTERN TESTING CO., INC.

Company: DEUTSCH OIL COMPANY
 Well: #1-15 CRAVENS
 Field: TKT 21825 DST 1

[Friday: May. 2, 1997]
 Page 2

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
460	0	12:46: 8	0.9172	74.19
469	0	12:47:13	0.9352	76.02
478	0	12:48:18	0.9532	79.70
487	0	12:49:23	0.9712	84.30
496	0	12:50:28	0.9893	87.06
505	0	12:51:32	1.0073	90.74
514	0	12:52:37	1.0253	92.56
523	0	12:53:42	1.0433	95.32
532	0	12:54:47	1.0613	101.77
541	0	12:55:52	1.0793	107.30
550	0	12:56:57	1.0973	114.68
559	0	12:58: 1	1.1154	122.98
568	0	12:59: 7	1.1334	135.91
577	0	13: 0:12	1.1515	150.69
586	0	13: 1:17	1.1696	167.33
595	0	13: 2:22	1.1876	183.96
END SHUTIN 1				
START FLOW 2				
602	0	13: 4: 0	1.2150	77.53
611	0	13: 5: 5	1.2330	77.51
620	0	13: 6:10	1.2510	74.71
629	0	13: 7:14	1.2689	70.99
638	0	13: 8:19	1.2869	68.19
647	0	13: 9:24	1.3049	67.24
656	0	13:10:29	1.3229	66.30
665	0	13:11:33	1.3408	64.42
674	0	13:12:38	1.3588	62.55
683	0	13:13:43	1.3768	62.53
692	0	13:14:47	1.3948	62.51
701	0	13:15:52	1.4128	60.64
710	0	13:16:57	1.4307	60.61
719	0	13:18: 2	1.4487	60.59
728	0	13:19: 6	1.4667	60.57
737	0	13:20:11	1.4847	60.55
746	0	13:21:16	1.5027	60.53
755	0	13:22:21	1.5207	60.50
764	0	13:23:25	1.5386	60.48
773	0	13:24:30	1.5566	60.46
782	0	13:25:35	1.5746	60.44
791	0	13:26:40	1.5926	60.42
800	0	13:27:44	1.6106	60.39
809	0	13:28:49	1.6286	60.37
818	0	13:29:54	1.6466	60.35
827	0	13:30:59	1.6645	59.40
836	0	13:32: 3	1.6825	59.38
845	0	13:33: 8	1.7005	59.36
854	0	13:34:13	1.7185	59.34
863	0	13:35:18	1.7365	59.32
END FLOW 2				
START SHUTIN 2				
864	0	13:35:25	1.7385	59.31
872	0	13:36:22	1.7545	59.29
881	0	13:37:27	1.7724	59.27
890	0	13:38:32	1.7904	59.25
899	0	13:39:37	1.8084	59.23

WESTERN TESTING CO., INC.

Company: DEUTSCH OIL COMPANY
Well: #1-15 CRAVENS
Field: TKT 21825 DST 1

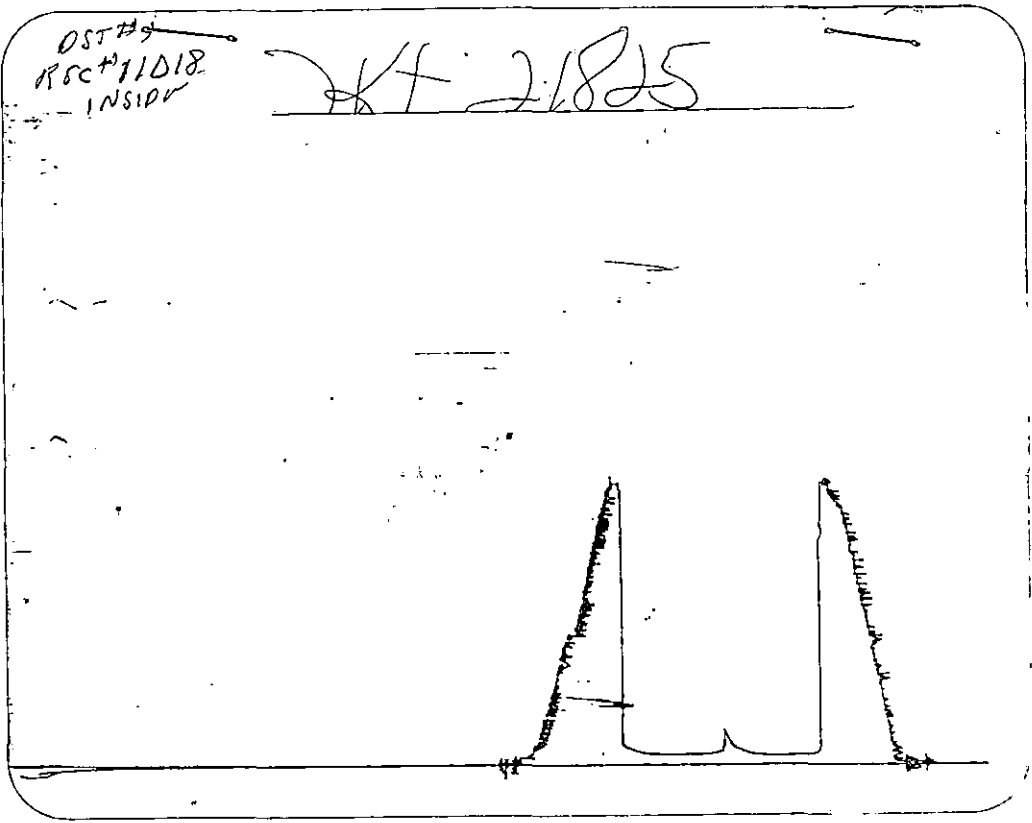
[Friday: May. 2, 1997]
Page 3

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
908	0	13:40:41	1.8264	59.21
917	0	13:41:46	1.8444	59.18
926	0	13:42:51	1.8624	59.16
935	0	13:43:55	1.8803	59.14
944	0	13:45: 0	1.8983	59.12
953	0	13:46: 5	1.9163	59.10
962	0	13:47:10	1.9343	59.07
971	0	13:48:14	1.9523	59.05
980	0	13:49:19	1.9703	59.95
989	0	13:50:24	1.9883	59.93
998	0	13:51:29	2.0063	60.84
1007	0	13:52:34	2.0243	61.74
1016	0	13:53:38	2.0422	61.72
1025	0	13:54:43	2.0602	61.70
1034	0	13:55:48	2.0782	62.60
1043	0	13:56:53	2.0962	62.58
1052	0	13:57:57	2.1142	62.55
1061	0	13:59: 2	2.1322	64.38
1070	0	14: 0: 7	2.1502	64.36
1079	0	14: 1:12	2.1681	65.26
1088	0	14: 2:16	2.1862	67.09
1097	0	14: 3:21	2.2041	68.00
1106	0	14: 4:26	2.2221	70.75
1115	0	14: 5:31	2.2401	72.58
1124	0	14: 6:36	2.2581	75.33
1133	0	14: 7:40	2.2761	76.23
1142	0	14: 8:45	2.2941	78.99
1151	0	14: 9:50	2.3121	82.67
1160	0	14:10:55	2.3301	85.42
1169	0	14:12: 0	2.3481	88.17
1178	0	14:13: 4	2.3661	91.85
1187	0	14:14: 9	2.3841	95.53
1196	0	14:15:14	2.4021	98.28
1205	0	14:16:19	2.4202	102.89
1214	0	14:17:24	2.4382	107.49
1223	0	14:18:28	2.4562	112.10
1232	0	14:19:33	2.4742	119.48

WESTERN TESTING CO., INC.

DST#
RSC#11018
INSIDV

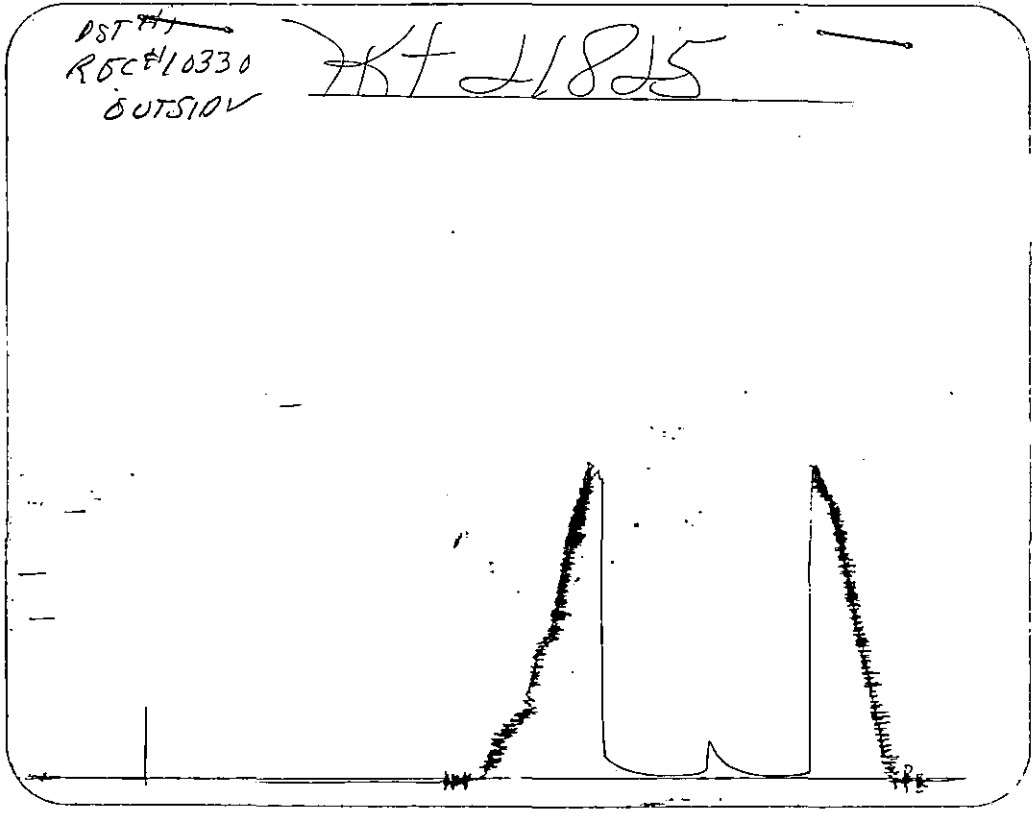
KT 21825



Inside Recorder

DST#
RSC#10330
OUTSIDV

KT 21825



Outside Recorder

DST REPORT

GENERAL INFORMATION

DATE : 5/3/97 TICKET : 22426
CUSTOMER : DEUTSCH OIL COMPANY LEASE : CRAVENS
WELL : #1-15 TEST: 2 GEOLOGIST: DEUTSCH
ELEVATION: 1804 KB FORMATION: VIOLA
SECTION : 15 TOWNSHIP : 25S
RANGE : 11W COUNTY: STAFFORD STATE : KS
GAUGE SN#: 10330 RANGE : 4000 CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3868.00 ft TO: 3895.00 ft TVD: 3895.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: GAS
DEPTH OF RECORDERS: 3871.0 ft 3892.0 ft
TEMPERATURE: 115.0

DRILL COLLAR LENGTH: 0.0 ft I.D.: 0.000 in
WEIGHT PIPE LENGTH : 0.0 ft I.D.: 0.000 in
DRILL PIPE LENGTH : 3846.0 ft I.D.: 3.800 in
TEST TOOL LENGTH : 22.0 ft TOOL SIZE : 5.500 in
ANCHOR LENGTH : 27.0 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: 3863.0 ft SIZE: 6.630 in
PACKER DEPTH: 3868.0 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. : DUKE DRILLING RIG 1
MUD TYPE : CHEMICAL VISCOSITY : 60.00 cp
WEIGHT : 9.300 ppg WATER LOSS: 10.000 cc
CHLORIDES : 7000 ppm
JARS-MAKE :
DID WELL FLOW?: NO SERIAL NUMBER:
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW IMMEDIATELY - GAS
TO SURFACE IN 4 MINUTES. FINAL FLOW PERIOD GAS
TO SURFACE THROUGHOUT. SEE GAS VOLUME REPORT.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
30.0	0.0	10.0	0.0	90.0	GASSY MUD
120.0	5.0	10.0	0.0	85.0	GASSY SLI. OIL CUT MUD

RATE INFORMATION

OIL VOLUME:	0.0842 STB	TOTAL FLOW TIME:	60.0000 min.
GAS VOLUME:	1.1814 SCF	AVERAGE OIL RATE:	36.3563 STB/D
MUD VOLUME:	1.8094 STB	AVERAGE WATER RATE:	0.0000 STB/D
WATER VOLUME:	0.0000 STB		
TOTAL FLUID :	1.8936 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1871.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	436.00	422.00
INITIAL SHUT-IN	60.00		680.00
FINAL FLOW	30.00	447.00	435.00
FINAL SHUT-IN	90.00		680.00

FINAL HYDROSTATIC PRESSURE: 1810.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1994.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	417.29	437.52
INITIAL SHUT-IN	60.00		689.45
FINAL FLOW	30.00	452.89	431.64
FINAL SHUT-IN	90.00		695.61

FINAL HYDROSTATIC PRESSURE: 1911.00

GAS FLOW REPORT

GENERAL INFORMATION

DATE : 5/3/97	TICKET : 22426
CUSTOMER : DEUTSCH OIL COMPANY	LEASE : CRAVENS
WELL : #1-15 TEST: 2	GEOLOGIST: DEUTSCH
ELEVATION: 1804 KB	FORMATION: VIOLA
SECTION : 15	TOWNSHIP : 25S
RANGE : 11W COUNTY: STAFFORD	STATE : KS
GAUGE SN#: 10330 RANGE : 4000	CLOCK : 12

PRE FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
5 MIN	MERLA	1.250	16 PSIG	1064000 SCF/D
10 MIN	MERLA	1.250	20 PSIG	1233000 SCF/D
15 MIN	MERLA	1.250	24 PSIG	1388000 SCF/D
20 MIN	MERLA	1.250	24 PSIG	1388000 SCF/D
25 MIN	MERLA	1.250	26 PSIG	1462000 SCF/D

SECOND FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
5 MIN	MERLA	1.250	24 PSIG	1388000 SCF/D
10 MIN	MERLA	1.250	26 PSIG	1462000 SCF/D
15 MIN	MERLA	1.250	26 PSIG	1462000 SCF/D
20 MIN	MERLA	1.250	28 PSIG	1540000 SCF/D
25 MIN	MERLA	1.250	28 PSIG	1540000 SCF/D

Company: DEUTSCH OIL COMPANY
Well: #1-15 CRAVENS
Field: TKT 22426 DST 2

[Saturday: May. 3, 1997]
Page 1

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)

START FLOW 1				
1	0	16:45: 1	0.0000	417.29
6	0	16:45:37	0.0100	417.33
11	0	16:46:13	0.0200	417.37
16	0	16:46:49	0.0300	417.41
21	0	16:47:25	0.0400	415.58
26	0	16:48: 1	0.0500	413.74
31	0	16:48:37	0.0600	411.91
36	0	16:49:13	0.0701	411.01
41	0	16:49:49	0.0801	410.11
46	0	16:50:25	0.0901	407.34
51	0	16:51: 1	0.1001	406.44
56	0	16:51:37	0.1101	406.48
61	0	16:52:13	0.1201	405.58
66	0	16:52:49	0.1301	405.62
71	0	16:53:25	0.1401	405.66
76	0	16:54: 1	0.1501	405.70
81	0	16:54:37	0.1601	405.74
86	0	16:55:13	0.1701	405.78
91	0	16:55:49	0.1801	405.82
96	0	16:56:25	0.1901	404.92
101	0	16:57: 1	0.2001	404.96
106	0	16:57:37	0.2101	405.00
111	0	16:58:13	0.2201	405.04
116	0	16:58:49	0.2300	405.08
121	0	16:59:25	0.2400	405.12
126	0	17: 0: 1	0.2500	405.16
131	0	17: 0:37	0.2600	405.20
136	0	17: 1:13	0.2700	405.24
141	0	17: 1:49	0.2800	405.28
146	0	17: 2:25	0.2900	405.32
151	0	17: 3: 1	0.3000	405.36
156	0	17: 3:37	0.3100	405.40
161	0	17: 4:13	0.3200	405.44
166	0	17: 4:49	0.3300	405.48
171	0	17: 5:25	0.3399	406.46
176	0	17: 6: 1	0.3499	406.50
181	0	17: 6:37	0.3599	406.54
186	0	17: 7:11	0.3693	437.52
END FLOW 1				
START SHUTIN 1				
189	0	17: 7:31	0.3750	455.36
191	0	17: 7:42	0.3782	500.37
196	0	17: 8:13	0.3866	586.07
201	0	17: 8:45	0.3956	641.37
206	0	17: 9:20	0.4054	653.38
211	0	17: 9:56	0.4153	658.02
216	0	17:10:32	0.4252	660.83
221	0	17:11: 7	0.4351	663.63
226	0	17:11:43	0.4451	666.43
231	0	17:12:19	0.4550	669.23
236	0	17:12:55	0.4650	671.11
241	0	17:13:31	0.4749	673.00
246	0	17:14: 7	0.4849	673.96
251	0	17:14:43	0.4949	675.84

WESTERN TESTING CO., INC.

Company: DEUTSCH OIL COMPANY
Well: #1-15 CRAVENS
Field: TKT 22426 DST 2

[Saturday: May. 3, 1997]
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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
256	0	17:15:18	0.5048	676.80
261	0	17:15:54	0.5148	676.84
266	0	17:16:30	0.5248	677.80
271	0	17:17: 6	0.5348	677.84
276	0	17:17:42	0.5448	678.80
281	0	17:18:18	0.5547	679.76
286	0	17:18:54	0.5647	679.79
291	0	17:19:30	0.5747	680.75
296	0	17:20: 6	0.5847	681.72
301	0	17:20:42	0.5947	681.75
306	0	17:21:18	0.6047	681.79
311	0	17:21:54	0.6147	681.83
316	0	17:22:30	0.6247	681.87
321	0	17:23: 6	0.6346	681.91
326	0	17:23:42	0.6446	682.87
331	0	17:24:18	0.6546	682.91
336	0	17:24:54	0.6646	682.95
341	0	17:25:30	0.6746	682.99
346	0	17:26: 5	0.6846	683.95
351	0	17:26:41	0.6946	683.99
356	0	17:27:17	0.7045	684.03
361	0	17:27:53	0.7145	684.99
366	0	17:28:29	0.7245	685.03
371	0	17:29: 5	0.7345	685.06
376	0	17:29:41	0.7445	685.10
381	0	17:30:17	0.7545	685.14
386	0	17:30:53	0.7645	685.18
391	0	17:31:29	0.7745	685.22
396	0	17:32: 5	0.7844	686.18
401	0	17:32:41	0.7944	686.22
406	0	17:33:17	0.8044	686.26
411	0	17:33:53	0.8144	686.30
416	0	17:34:29	0.8244	686.34
421	0	17:35: 5	0.8344	687.30
426	0	17:35:41	0.8444	687.34
431	0	17:36:17	0.8544	687.38
436	0	17:36:53	0.8644	687.41
441	0	17:37:29	0.8744	687.45
446	0	17:38: 5	0.8844	687.49
451	0	17:38:41	0.8943	687.53
456	0	17:39:17	0.9043	687.57
461	0	17:39:53	0.9143	687.61
466	0	17:40:28	0.9243	687.65
471	0	17:41: 4	0.9343	687.69
476	0	17:41:40	0.9443	687.73
481	0	17:42:16	0.9543	687.77
486	0	17:42:52	0.9643	687.81
491	0	17:43:28	0.9743	687.84
496	0	17:44: 4	0.9843	687.88
501	0	17:44:40	0.9942	687.92
506	0	17:45:16	1.0042	687.96
511	0	17:45:52	1.0142	688.00
516	0	17:46:28	1.0242	688.04
521	0	17:47: 4	1.0342	688.08
526	0	17:47:40	1.0442	688.12

WESTERN TESTING CO., INC.

Company: DEUTSCH OIL COMPANY
Well: #1-15 CRAVENS
Field: TKT 22426 DST 2

[Saturday: May. 3, 1997]
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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
531	0	17:48:16	1.0542	688.16
536	0	17:48:52	1.0642	688.20
541	0	17:49:28	1.0742	688.24
546	0	17:50: 4	1.0842	688.27
551	0	17:50:40	1.0942	688.31
556	0	17:51:16	1.1041	688.35
561	0	17:51:52	1.1142	688.39
566	0	17:52:28	1.1241	688.43
571	0	17:53: 4	1.1341	688.47
576	0	17:53:40	1.1441	688.51
581	0	17:54:16	1.1541	688.55
586	0	17:54:52	1.1641	688.59
591	0	17:55:28	1.1741	688.63
596	0	17:56: 4	1.1841	688.67
601	0	17:56:40	1.1941	688.70
606	0	17:57:16	1.2041	688.74
611	0	17:57:52	1.2141	688.78
616	0	17:58:28	1.2241	688.82
621	0	17:59: 4	1.2340	688.86
626	0	17:59:39	1.2440	688.90
631	0	18: 0:15	1.2540	688.94
636	0	18: 0:51	1.2640	688.98
641	0	18: 1:27	1.2740	689.02
646	0	18: 2: 3	1.2840	689.06
651	0	18: 2:39	1.2940	689.10
656	0	18: 3:15	1.3040	689.14
661	0	18: 3:51	1.3140	689.17
666	0	18: 4:27	1.3240	689.21
671	0	18: 5: 3	1.3340	689.25
676	0	18: 5:39	1.3440	689.29
681	0	18: 6:15	1.3539	689.33
686	0	18: 6:51	1.3639	689.37
691	0	18: 7:27	1.3739	689.41
696	0	18: 8: 3	1.3839	689.45
		END SHUTIN 1		
		START FLOW 2		
700	0	18: 9:16	1.4042	452.89
705	0	18: 9:52	1.4142	452.93
710	0	18:10:28	1.4242	452.97
715	0	18:11: 4	1.4342	453.01
720	0	18:11:40	1.4443	448.36
725	0	18:12:17	1.4544	443.72
730	0	18:12:53	1.4644	440.94
735	0	18:13:29	1.4744	439.11
740	0	18:14: 5	1.4844	438.21
745	0	18:14:41	1.4945	436.37
750	0	18:15:17	1.5045	436.41
755	0	18:15:53	1.5145	434.58
760	0	18:16:29	1.5245	434.62
765	0	18:17: 5	1.5345	433.72
770	0	18:17:41	1.5445	433.76
775	0	18:18:17	1.5545	433.80
780	0	18:18:53	1.5645	432.90
785	0	18:19:29	1.5745	432.94
790	0	18:20: 5	1.5845	432.04

WESTERN TESTING CO., INC.

Company: DEUTSCH OIL COMPANY
Well: #1-15 CRAVENS
Field: TKT 22426 DST 2

[Saturday: May. 3, 1997]
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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
795	0	18:20:41	1.5945	432.08
800	0	18:21:17	1.6045	431.19
805	0	18:21:53	1.6145	431.23
810	0	18:22:29	1.6245	430.33
815	0	18:23: 5	1.6345	430.37
820	0	18:23:41	1.6445	430.41
825	0	18:24:17	1.6544	430.45
830	0	18:24:53	1.6644	430.49
835	0	18:25:29	1.6744	430.53
840	0	18:26: 5	1.6844	430.57
845	0	18:26:41	1.6944	430.61
850	0	18:27:17	1.7044	430.65
855	0	18:27:53	1.7144	430.69
860	0	18:28:29	1.7244	429.79
865	0	18:29: 5	1.7344	429.83
870	0	18:29:41	1.7444	429.87
875	0	18:30:17	1.7544	429.91
880	0	18:30:53	1.7644	429.95
885	0	18:31:29	1.7744	429.99
890	0	18:32: 5	1.7844	430.03
895	0	18:32:41	1.7943	430.07
900	0	18:33:17	1.8043	430.11
905	0	18:33:53	1.8143	430.15
910	0	18:34:29	1.8243	430.19
915	0	18:35: 4	1.8343	430.23
920	0	18:35:40	1.8443	430.27
925	0	18:36:16	1.8543	430.31
930	0	18:36:52	1.8643	430.35
935	0	18:37:28	1.8743	431.32
940	0	18:38: 4	1.8843	431.36
945	0	18:38:40	1.8942	431.40
950	0	18:39:16	1.9042	431.44
955	0	18:39:52	1.9142	431.48
960	0	18:40:28	1.9242	431.52
965	0	18:41: 4	1.9342	431.56
970	0	18:41:40	1.9442	431.60
975	0	18:42:16	1.9542	431.64
		END FLOW 2		
		START SHUTIN 2		
980	0	18:42:49	1.9634	473.87
986	0	18:43:23	1.9729	610.70
991	0	18:43:57	1.9823	643.89
996	0	18:44:33	1.9921	652.22
1001	0	18:45: 8	2.0020	659.63
1006	0	18:45:44	2.0119	665.19
1011	0	18:46:19	2.0218	668.92
1016	0	18:46:55	2.0317	671.72
1021	0	18:47:31	2.0417	674.52
1026	0	18:48: 7	2.0516	677.32
1031	0	18:48:43	2.0616	678.28
1036	0	18:49:19	2.0716	679.24
1041	0	18:49:54	2.0815	681.12
1046	0	18:50:30	2.0915	682.08
1051	0	18:51: 6	2.1015	683.04
1056	0	18:51:42	2.1114	684.00

WESTERN TESTING CO., INC.

Company: DEUTSCH OIL COMPANY
Well: #1-15 CRAVENS
Field: TKT 22426 DST 2

[Saturday: May. 3, 1997]
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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
1061	0	18:52:18	2.1214	684.04
1066	0	18:52:54	2.1314	684.08
1071	0	18:53:30	2.1414	684.12
1076	0	18:54: 6	2.1514	685.08
1081	0	18:54:42	2.1614	686.04
1086	0	18:55:18	2.1714	686.08
1091	0	18:55:54	2.1813	686.12
1096	0	18:56:30	2.1913	686.16
1101	0	18:57: 6	2.2013	686.20
1106	0	18:57:42	2.2113	686.24
1111	0	18:58:18	2.2213	687.20
1116	0	18:58:54	2.2313	687.24
1121	0	18:59:30	2.2413	687.28
1126	0	19: 0: 6	2.2513	687.32
1131	0	19: 0:41	2.2613	687.35
1136	0	19: 1:17	2.2712	687.39
1141	0	19: 1:53	2.2812	687.43
1146	0	19: 2:29	2.2912	687.47
1151	0	19: 3: 5	2.3012	687.51
1156	0	19: 3:41	2.3112	687.55
1161	0	19: 4:17	2.3212	688.51
1166	0	19: 4:53	2.3312	688.55
1171	0	19: 5:29	2.3412	688.59
1176	0	19: 6: 5	2.3512	688.63
1181	0	19: 6:41	2.3612	688.67
1186	0	19: 7:17	2.3711	688.71
1191	0	19: 7:53	2.3811	688.74
1196	0	19: 8:29	2.3911	688.78
1201	0	19: 9: 5	2.4011	688.82
1206	0	19: 9:41	2.4111	688.86
1211	0	19:10:17	2.4211	689.82
1216	0	19:10:53	2.4311	689.86
1221	0	19:11:29	2.4411	689.90
1226	0	19:12: 5	2.4511	689.94
1231	0	19:12:41	2.4610	689.98
1236	0	19:13:17	2.4710	690.02
1241	0	19:13:53	2.4810	690.06
1246	0	19:14:29	2.4910	690.10
1251	0	19:15: 5	2.5010	690.13
1256	0	19:15:41	2.5110	690.17
1261	0	19:16:17	2.5210	690.21
1266	0	19:16:52	2.5310	690.25
1271	0	19:17:28	2.5410	690.29
1276	0	19:18: 4	2.5510	690.33
1281	0	19:18:40	2.5610	690.37
1286	0	19:19:16	2.5710	690.41
1291	0	19:19:52	2.5809	690.45
1296	0	19:20:28	2.5909	690.49
1301	0	19:21: 4	2.6009	690.53
1306	0	19:21:40	2.6109	690.56
1311	0	19:22:16	2.6209	690.60
1316	0	19:22:52	2.6309	690.64
1321	0	19:23:28	2.6409	690.68
1326	0	19:24: 4	2.6509	690.72
1331	0	19:24:40	2.6609	690.76

WESTERN TESTING CO., INC.

Company: DEUTSCH OIL COMPANY
Well: #1-15 CRAVENS
Field: TKT 22426 DST 2

[Saturday: May. 3, 1997]
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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
1336	0	19:25:16	2.6709	690.80
1341	0	19:25:52	2.6809	690.84
1346	0	19:26:28	2.6908	690.88
1351	0	19:27: 4	2.7008	690.92
1356	0	19:27:40	2.7108	690.96
1361	0	19:28:16	2.7208	690.99
1366	0	19:28:52	2.7308	691.03
1371	0	19:29:28	2.7408	691.07
1376	0	19:30: 4	2.7508	691.11
1381	0	19:30:40	2.7608	691.15
1386	0	19:31:16	2.7708	691.19
1391	0	19:31:52	2.7808	691.23
1396	0	19:32:28	2.7908	691.27
1401	0	19:33: 4	2.8008	691.31
1406	0	19:33:40	2.8107	691.35
1411	0	19:34:16	2.8207	691.39
1416	0	19:34:52	2.8307	691.42
1421	0	19:35:28	2.8407	691.46
1426	0	19:36: 3	2.8507	691.50
1431	0	19:36:39	2.8607	691.54
1436	0	19:37:15	2.8707	691.58
1441	0	19:37:51	2.8807	691.62
1446	0	19:38:27	2.8907	691.66
1451	0	19:39: 3	2.9007	691.70
1456	0	19:39:39	2.9107	691.74
1461	0	19:40:15	2.9206	691.78
1466	0	19:40:51	2.9306	691.82
1471	0	19:41:27	2.9406	691.85
1476	0	19:42: 3	2.9506	691.89
1481	0	19:42:39	2.9606	691.93
1486	0	19:43:15	2.9706	691.97
1491	0	19:43:51	2.9806	692.01
1496	0	19:44:27	2.9906	692.05
1501	0	19:45: 3	3.0006	692.09
1506	0	19:45:39	3.0106	692.13
1511	0	19:46:15	3.0206	692.17
1516	0	19:46:51	3.0306	692.21
1521	0	19:47:27	3.0405	692.25
1526	0	19:48: 3	3.0505	692.28
1531	0	19:48:39	3.0605	692.32
1536	0	19:49:15	3.0705	692.36
1541	0	19:49:51	3.0805	692.40
1546	0	19:50:27	3.0905	692.44
1551	0	19:51: 3	3.1005	692.48
1556	0	19:51:39	3.1105	692.52
1561	0	19:52:15	3.1205	692.56
1566	0	19:52:51	3.1305	692.60
1571	0	19:53:27	3.1405	692.64
1576	0	19:54: 3	3.1504	692.68
1581	0	19:54:39	3.1604	692.71
1586	0	19:55:15	3.1704	692.75
1591	0	19:55:50	3.1804	692.79
1596	0	19:56:26	3.1904	692.83
1601	0	19:57: 2	3.2004	692.87
1606	0	19:57:38	3.2104	692.91

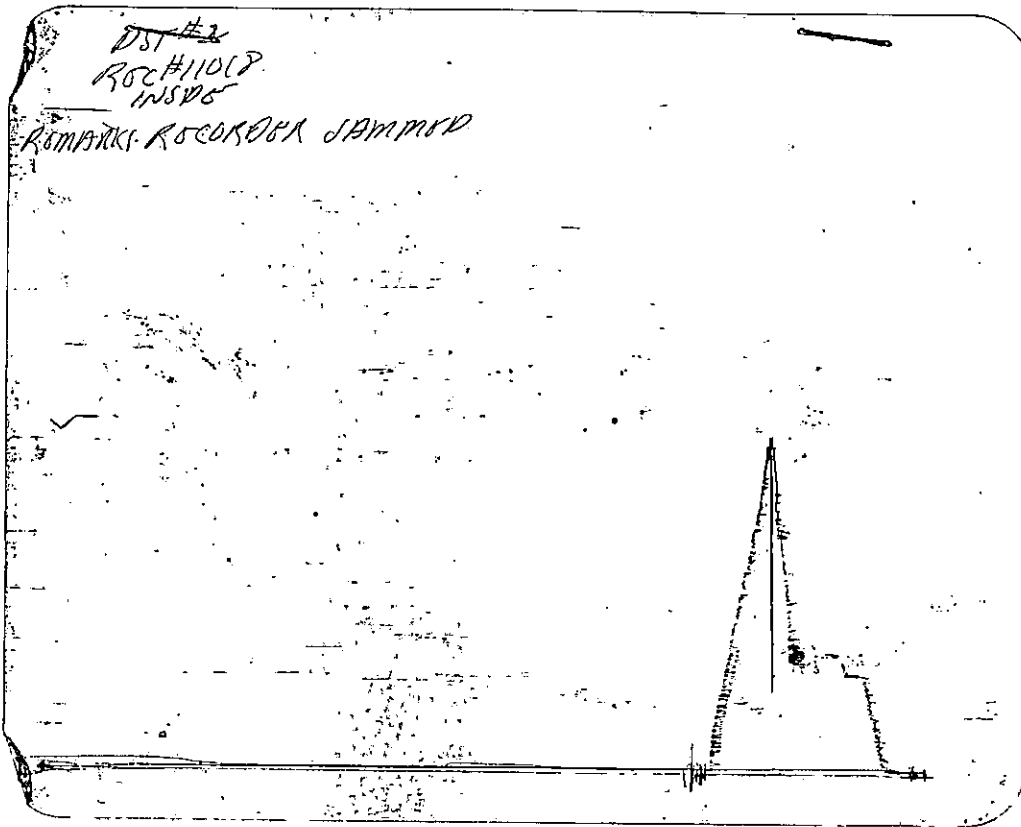
WESTERN TESTING CO., INC.

Company: DEUTSCH OIL COMPANY
Well: #1-15 CRAVENS
Field: TKT 22426 DST 2

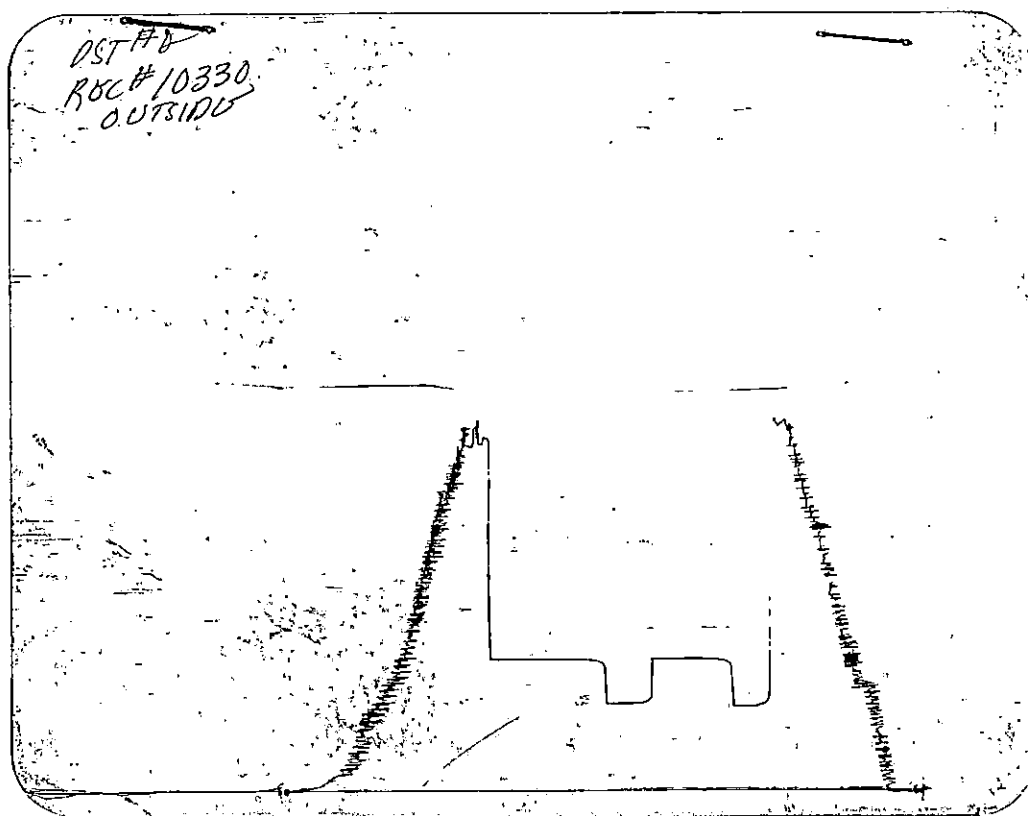
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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
1611	0	19:58:14	3.2204	692.95
1616	0	19:58:50	3.2304	692.99
1621	0	19:59:26	3.2404	693.03
1626	0	20: 0: 2	3.2504	693.07
1631	0	20: 0:38	3.2604	693.11
1636	0	20: 1:14	3.2703	693.14
1641	0	20: 1:50	3.2803	693.18
1646	0	20: 2:26	3.2903	693.22
1651	0	20: 3: 2	3.3003	693.26
1656	0	20: 3:38	3.3103	693.30
1661	0	20: 4:14	3.3203	694.26
1666	0	20: 4:50	3.3303	694.30
1671	0	20: 5:26	3.3403	694.34
1676	0	20: 6: 2	3.3503	694.38
1681	0	20: 6:38	3.3602	694.42
1686	0	20: 7:14	3.3702	694.46
1691	0	20: 7:50	3.3802	694.50
1696	0	20: 8:26	3.3902	694.53
1701	0	20: 9: 2	3.4002	695.49
1706	0	20: 9:38	3.4102	695.53
1711	0	20:10:14	3.4202	695.57
1716	0	20:10:50	3.4302	695.61

WESTERN TESTING CO., INC.



Inside Recorder



Outside Recorder

DST REPORT

GENERAL INFORMATION

DATE : 5/4/97	TICKET : 22427
CUSTOMER : DEUTSCH OIL COMPANY	LEASE : CRAVENS
WELL : #1-15 TEST: 3	GEOLOGIST: DEUTSCH
ELEVATION: 1804 KB	FORMATION: SIMPSON
SECTION : 15	TOWNSHIP : 25S
RANGE : 11W COUNTY: STAFFORD	STATE : KS
GAUGE SN#: 11018 RANGE : 4425	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3950.00 ft	TO: 4005.00 ft	TVD: 4005.0 ft
DEPTH OF SELECTIVE ZONE:		TEST TYPE: OIL
DEPTH OF RECORDERS: 3953.0 ft	4002.0 ft	
TEMPERATURE: 112.0		

DRILL COLLAR LENGTH: 0.0 ft	I.D.:	0.000 in
WEIGHT PIPE LENGTH : 0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH : 3928.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH : 22.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH : 55.0 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: 3945.0 ft	SIZE:	6.630 in
PACKER DEPTH: 3950.0 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. : DUKE DRILLING RIG 1	
MUD TYPE : CHEMICAL	VISCOSITY : 57.00 cp
WEIGHT : 9.400 ppg	WATER LOSS: 10.400 cc
CHLORIDES : 7500 ppm	
JARS-MAKE :	SERIAL NUMBER:
DID WELL FLOW?: NO	REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK BLOW - DEAD IN 25 MINUTES
 FINAL FLOW PERIOD NO BLOW.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
3.0	0.0	0.0	0.0	100.0	DRILLING MUD

RATE INFORMATION

OIL VOLUME:	0.0000 STB	TOTAL FLOW TIME:	60.0000 min.
GAS VOLUME:	0.0000 SCF	AVERAGE OIL RATE:	0.0000 STB/D
MUD VOLUME:	0.0421 STB	AVERAGE WATER RATE:	0.0000 STB/D
WATER VOLUME:	0.0000 STB		
TOTAL FLUID :	0.0421 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1960.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	40.00	42.00
INITIAL SHUT-IN	30.00		44.00
FINAL FLOW	30.00	44.00	44.00
FINAL SHUT-IN	30.00		46.00

FINAL HYDROSTATIC PRESSURE: 1931.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1979.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	61.06	49.22
INITIAL SHUT-IN	30.00		50.55
FINAL FLOW	30.00	50.53	49.96
FINAL SHUT-IN	30.00		50.88

FINAL HYDROSTATIC PRESSURE: 1935.00

Company: DEUTSCH OIL COMPANY
Well: #1-15 CRAVENS
Field: TKT 22427 DST 3

[Sunday: May. 4, 1997]
Page 1

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
START FLOW 1				
1	0	12:31:19	0.0000	61.06
10	0	12:32:24	0.0180	61.99
19	0	12:33:29	0.0360	61.06
28	0	12:34:33	0.0540	60.14
37	0	12:35:38	0.0719	58.28
46	0	12:36:43	0.0899	57.36
55	0	12:37:48	0.1079	55.51
64	0	12:38:52	0.1259	53.66
73	0	12:39:57	0.1439	51.81
82	0	12:41: 2	0.1619	50.88
91	0	12:42: 7	0.1798	50.88
100	0	12:43:11	0.1978	50.88
109	0	12:44:16	0.2158	49.96
118	0	12:45:21	0.2338	49.96
127	0	12:46:26	0.2518	49.96
136	0	12:47:30	0.2698	49.96
145	0	12:48:35	0.2878	49.96
154	0	12:49:40	0.3058	49.96
163	0	12:50:45	0.3237	48.11
172	0	12:51:49	0.3417	48.11
181	0	12:52:54	0.3597	48.11
190	0	12:53:59	0.3777	48.11
199	0	12:55: 4	0.3957	48.11
208	0	12:56: 8	0.4137	48.19
217	0	12:57:13	0.4316	48.53
226	0	12:58:18	0.4496	48.88
235	0	12:59:23	0.4676	49.22
END FLOW 1				
START SHUTIN 1				
242	0	13: 0:13	0.4816	49.48
244	0	13: 0:27	0.4856	49.55
253	0	13: 1:32	0.5036	49.87
262	0	13: 2:37	0.5216	50.16
271	0	13: 3:42	0.5396	50.45
280	0	13: 4:46	0.5575	48.11
289	0	13: 5:51	0.5755	48.11
298	0	13: 6:56	0.5935	48.11
307	0	13: 8: 0	0.6115	48.12
316	0	13: 9: 5	0.6295	48.14
325	0	13:10:10	0.6475	48.17
334	0	13:11:15	0.6655	48.22
343	0	13:12:19	0.6834	48.29
352	0	13:13:24	0.7014	48.38
361	0	13:14:29	0.7194	48.50
370	0	13:15:34	0.7374	48.64
379	0	13:16:38	0.7554	48.81
388	0	13:17:43	0.7734	49.02
397	0	13:18:48	0.7913	49.25
406	0	13:19:53	0.8093	49.49
415	0	13:20:57	0.8273	49.72
424	0	13:22: 2	0.8453	49.94
433	0	13:23: 7	0.8633	50.13
442	0	13:24:12	0.8813	50.30
451	0	13:25:16	0.8993	50.42

WESTERN TESTING CO., INC.

Company: DEUTSCH OIL COMPANY
Well: #1-15 CRAVENS
Field: TKT 22427 DST 3

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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
460	0	13:26:21	0.9172	50.51
469	0	13:27:26	0.9352	50.56
478	0	13:28:31	0.9532	50.57
487	0	13:29:35	0.9712	50.55
		END SHUTIN 1		
		START FLOW 2		
491	0	13:30: 4	0.9792	50.53
496	0	13:30:40	0.9892	50.50
505	0	13:31:45	1.0072	50.43
514	0	13:32:50	1.0251	50.34
523	0	13:33:54	1.0431	50.23
532	0	13:34:59	1.0611	50.10
541	0	13:36: 4	1.0791	49.97
550	0	13:37: 9	1.0971	49.82
559	0	13:38:13	1.1151	49.66
568	0	13:39:18	1.1331	49.49
577	0	13:40:23	1.1510	49.32
586	0	13:41:28	1.1690	49.13
595	0	13:42:32	1.1870	48.95
604	0	13:43:37	1.2050	48.75
613	0	13:44:42	1.2230	48.56
622	0	13:45:47	1.2410	48.37
631	0	13:46:51	1.2589	48.17
640	0	13:47:56	1.2769	49.96
649	0	13:49: 1	1.2949	49.96
658	0	13:50: 6	1.3129	49.96
667	0	13:51:10	1.3309	49.96
676	0	13:52:15	1.3489	49.96
685	0	13:53:20	1.3669	49.96
694	0	13:54:25	1.3848	49.96
703	0	13:55:29	1.4028	49.96
712	0	13:56:34	1.4208	49.96
721	0	13:57:39	1.4388	49.96
730	0	13:58:44	1.4568	49.96
739	0	13:59:48	1.4748	49.96
748	0	14: 0:53	1.4928	49.96
757	0	14: 1:58	1.5107	49.96
		END FLOW 2		
		START SHUTIN 2		
758	0	14: 2: 5	1.5127	49.96
766	0	14: 3: 3	1.5287	49.96
775	0	14: 4: 7	1.5467	49.96
784	0	14: 5:12	1.5647	49.96
793	0	14: 6:17	1.5827	49.96
802	0	14: 7:22	1.6007	49.96
811	0	14: 8:26	1.6186	49.96
820	0	14: 9:31	1.6366	49.96
829	0	14:10:36	1.6546	50.88
838	0	14:11:41	1.6726	50.88
847	0	14:12:45	1.6906	50.88
856	0	14:13:50	1.7086	50.88
865	0	14:14:55	1.7266	50.88
874	0	14:16: 0	1.7445	50.88
883	0	14:17: 4	1.7625	50.88
892	0	14:18: 9	1.7805	50.88

WESTERN TESTING CO., INC.

Company: DEUTSCH OIL COMPANY
Well: #1-15 CRAVENS
Field: TKT 22427 DST 3

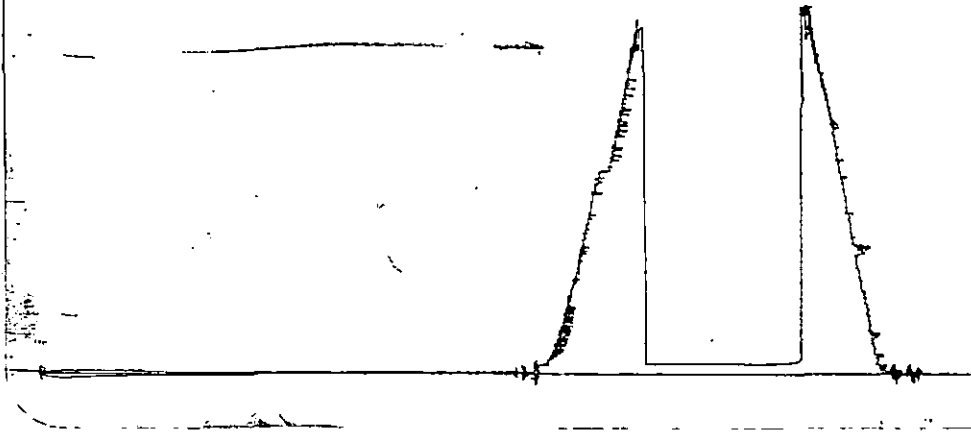
[Sunday: May. 4, 1997]
Page 3

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
901	0	14:19:14	1.7985	50.88
910	0	14:20:18	1.8165	50.88
919	0	14:21:23	1.8345	50.88
928	0	14:22:28	1.8525	50.88
937	0	14:23:33	1.8704	50.88
946	0	14:24:37	1.8884	50.88
955	0	14:25:42	1.9064	50.88
964	0	14:26:47	1.9244	50.88
973	0	14:27:52	1.9424	50.88

WESTERN TESTING CO., INC.

DST #3
REC# 11018
INSIDE

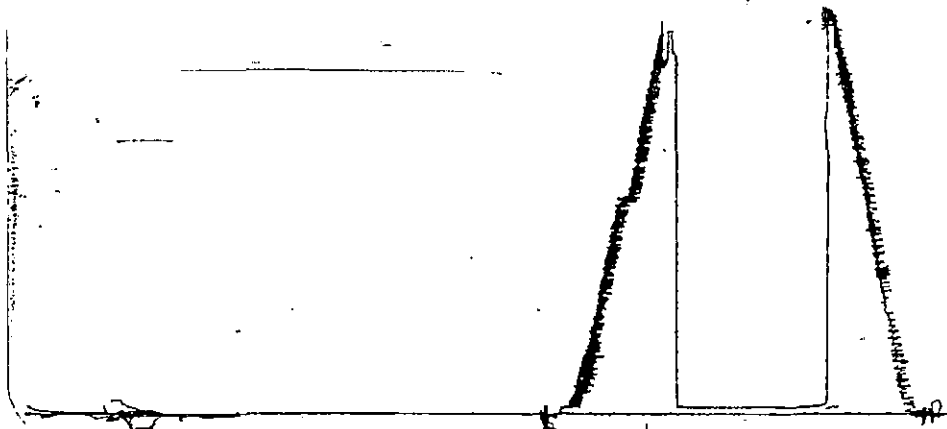
KT 2427



Inside Recorder

DST #3
REC# 10330
OUTSIDE

KT 2427

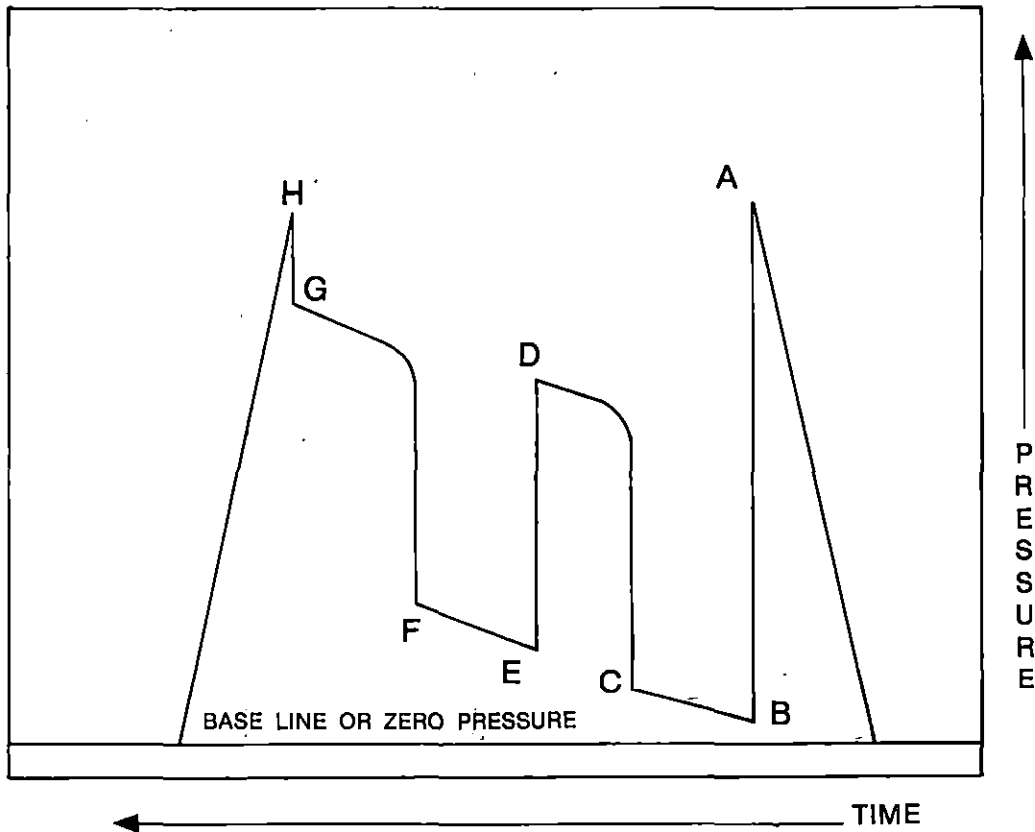


Outside Recorder

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.

AK-1 Recorders



A - Initial Hydrostatic

B - First Initial Flow

C - First Final Flow

D - Initial Shut-In

E - Second Initial Flow

F - Second Final Flow

G - Final Shut-In

H - Final Hydrostatic