

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

Operator: License 8061

Name: OIL PRODUCERS, INC. OF KANSAS

Address P.O. BOX 8647

City/State/Zip WICHITA, KANSAS 67208

Purchaser: WICHITA INDUSTRIAL / FARM LAND

Operator Contact Person: DIANA RICHECKY

Phone (316) 681-0231

Contractor: Name: MALLARD JV, INC.

License: 4958

Wellsite Geologist: WILLIAM SHEPHERD

Designate Type of Completion

New Well Re-Entry Workover

Oil SWD SIOW Temp. Abd.

Gas ENHR SIGW

Dry Other (Core, WSW, Expl., Cathodic, etc)

If Workover:

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

Deepening _____ Re-perf. _____ Conv. to Inj/SWD

Plug Back _____ PBTB

Commingle _____ Docket No. _____

Dual Completion _____ Docket No. _____

Other (SWD or Inj?) _____ Docket No. _____

8/8/98 8/27/98 9/23/98
Spud Date Date Reached TD Completion Date

SIDE ONE

API NO. 15- 097-21433-0000 ORIGINAL

County KIOWA

- - C - SW Sec. 15 Twp. 29 Rge. 20 ^EW

1320 Feet from ^SN (circle one) Line of Section

3960 Feet from ^EW (circle one) Line of Section

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

Lease Name RADER Well # 1

Field Name UN-NAMED

Producing Formation MISS Dolomite

Elevation: Ground 2388 KB 2393

Total Depth _____ PBTB _____

Amount of Surface Pipe Set and Cemented at 637

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set _____ Feet

If Alternate II completion, cement circulated from _____

feet depth to _____ w/ _____ sx cmt.

Drilling Fluid Management Plan Att. 11-18-98 C.C.
(Data must be collected from the Reserve Pit)

no free fluids per Drillers Log

Chloride content 0000 ppm Fluid volume 000 bbls

Dewatering method used: EVAPORATION AND RESTORE SITE

Location of fluid disposal if hauled offsite: _____

Operator Name Oil Producers, Inc. of Ks

Lease Name _____ License No. _____

Quarter _____ Sec. _____ Twp. _____ S Rng. _____ E/W

County _____ Docket No. _____

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 John S. Weir John S. Weir

Title President Date 10/22/98

Subscribed and sworn to before me this 22nd of October, 1998.

Notary Public Diana L. Richecky

Date Commission Expires Jan 12, 2000

K.C.C. OFFICE USE ONLY
F Letter of Confidentiality Attached
C Wireline Log Received
C Geologist Report Received
Distribution
 KCC SWD/Rep NGPA
 KGS Plug Other (Specify)

Form ACO-1 (7-91)



RECEIVED
KANSAS CORP COM.
NOV 22 10 12 AM '98

ORIGINAL ALLIED CEMENTING CO., INC. 9757

Federal Tax I.D.# 48-0727860

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:
med. lodge

DATE <u>8-18-98</u>	SEC. <u>15</u>	TWP. <u>29S</u>	RANGE <u>20W</u>	CALLED OUT <u>11:00 P.M.</u>	ON LOCATION <u>1:15 A.M.</u>	JOB START <u>8:30 A.M.</u>	JOB FINISH <u>9:45 A.M.</u>
LEASE <u>Radar</u>		WELL # <u>2</u>	LOCATION <u>mullinville, 3³/₄s-1¹/₂w-¹/₈s</u>		COUNTY <u>KLAWA</u>	STATE <u>Ks.</u>	
OLD OR <u>NEW</u> (Circle one)			<u>1/2 E.</u>				

CONTRACTOR Mallard Onq.
 TYPE OF JOB Surface Csg.
 HOLE SIZE 12¹/₄ T.D. 6.39'
 CASING SIZE 8⁵/₈ x 24 DEPTH 6.38'
 TUBING SIZE _____ DEPTH _____
 DRILL PIPE 4¹/₂ x hole DEPTH 6.39
 TOOL _____ DEPTH _____
 PRES. MAX _____ MINIMUM _____
 MEAS. LINE _____ SHOE JOINT _____
 CEMENT LEFT IN CSG. 1.5' By Request
 PERFS. _____
 DISPLACEMENT 39¹/₂ Bbls Fresh H₂O
 EQUIPMENT _____
 PUMP TRUCK CEMENTER Larry D.
 # 343 HELPER Justin H.
 BULK TRUCK _____
 # 240-231 DRIVER James H.
 BULK TRUCK _____
 # _____ DRIVER _____

OWNER Oil Producers of Ks. Inc.
 CEMENT
 AMOUNT ORDERED 200SXS. ALW+2%CAL²
7.5SXS. CLASS A+2%CAL²+2%GEL
 COMMON A 75 @ 6.35 476.25
 POZMIX _____ @ _____
 GEL 2 @ 9.50 19.00
 CHLORIDE 6 @ 28.00 168.00
ALW 200 @ 6.00 1200.00
 _____ @ _____
 _____ @ _____
 _____ @ _____
 HANDLING 275 @ 1.05 288.75
 MILEAGE 275 XAS .04 445.00
 TOTAL \$2647.00

REMARKS:
Pipe on Bottom. Break Circ.
mix + Pump 200SXS ALW+2%CAL²
@ 7.5SXS. CLASS A+2%CAL²+2%GEL
Cement In. Stop Pump. Release
Plug. Pump + Displace Plug w/ 39¹/₂ Bbls
Fresh H₂O. Stop Pumps. Shut In
Cement Circ. to Surface.

SERVICE
 DEPTH OF JOB 6.38'
 PUMP TRUCK CHARGE 0-300' 470.00
 EXTRA FOOTAGE 338' @ .43 145.34
 MILEAGE 45 @ 2.85 128.25
 PLUG wood-cup 8⁵/₈ @ 45.00 45.00
 _____ @ _____
 _____ @ _____
 TOTAL \$788.59

CHARGE TO: Oil Producers of Ks., Inc
 STREET P.O. Box 8647, 2400 N. Woodlawn, #230
 CITY WICHITA STATE KANSAS ZIP 67208

FLOAT EQUIPMENT
 _____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____

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.

TAX _____
 TOTAL CHARGE 3435.59
 DISCOUNT 515.33 IF PAID IN 30 DAYS
Net \$ 2920.26
 X [Signature]
 PRINTED NAME _____

SIGNATURE X _____



REMIT TO:
 P.O. BOX 951046
 DALLAS, TX 75395-1046
 Corporate FIN 73-0271280

INVOICE

HALLIBURTON ENERGY SERVICES
 A Division of Halliburton Company

INVOICE NO.	DATE
394941	08/27/1998

WELL LEASE NO./PROJECT	WELL/PROJECT LOCATION	STATE	OWNER
ORDER 1	KIOWA	KS	SAME
SERVICE LOCATION	CONTRACTOR	JOB PURPOSE	TICKET DATE
PRATT	MALLARD DRILLING	SHOWN BELOW	08/27/1998
ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER
46989	SHANE SUMMERS		
SHIPPED VIA			FILE NO.
COMPANY TRUCK			45605

DIRECT CORRESPONDENCE TO:

OIL PRODUCERS INC. OF KANSAS
 C/O MR. BRAD SIROKY
 1003 S. PEARL
 PRATT, KS 67124-8195

P O BOX 963
 PRATT KS 67124
 316-672-5593

*RADIA
 205-X
 C. HARRIS (CSW)*

REFERENCE NO.	DESCRIPTION	QUANTITY	UM	UNIT PRICE	AMOUNT
PRICING AREA - MID CONTINENT					
JOB PURPOSE - CEMENT PRODUCTION CASING					
000-117	MILEAGE CEMENTING ROUND TRIP	50	MI	3.65	182.50
		1	UNT		
000-119	MILEAGE FOR CREW	50	MI	2.15	N/C
		1	UNT		
001-016	CEMENTING CASING	5197	FT	2,422.00	2,422.00
		1	UNT		
018-303	CLAYFIX II, PER GAL	2	GAL	33.95	67.90
018-315	MUD FLUSH	500	GAL	.80	400.00
12A	GUIDE SHOE - 4 1/2" 8RD THD.	1	EA	105.00	105.00
825.201					
24A	INSERT FLOAT VALVE - 4 1/2" 8RD	1	EA	110.00	110.00
815.19101					
27	FILL-UP UNIT 4 1/2"-5"	1	EA	60.00	60.00
815.19113					
593	3-WIPER L-D PLUG - 4 1/2"	1	EA	184.00	184.00
801.0373					
594	4 1/2" LATCH DOWN BAFFLE	1	EA	116.00	116.00
801.03734					
40	CENTRALIZER 4-1/2 X 7-7/8	5	EA	59.00	295.00
806.60004					
504-308	CEMENT - STANDARD	100	SK	12.13	1,213.00
504-130	CEMENT - 50/50 POZMIX STANDARD	25	SK	8.23	205.75
507-918	GASSTOP	25	LB	41.30	1,032.50
507-775	HALAD-322	71	LB	7.70	546.70
509-968	SALT	950	LB	.18	171.00
507-970	D-AIR 1, POWDER	50	LB	4.27	213.50
508-291	GILSONITE BULK	500	LB	.58	290.00
508-127	CAL SEAL 60	5	SK	28.00	140.00
500-207	BULK SERVICE CHARGE	156	CFT	1.66	258.96
500-306	MILEAGE CMTG MAT DEL OR RETURN	339.92	TMI	1.25	424.90

***** CONTINUED ON NEXT PAGE *****

AFFIX JOB TKT

TERMS: If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If customer has an approved open account, invoices are payable on the twentieth day after date of invoice. Customer agrees to pay interest of any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, plus all collection and court costs.



REMIT TO:
 P.O. BOX 951046
 DALLAS, TX 75395-1046
 Corporate FIN 73-0271280

INVOICE

HALLIBURTON ENERGY SERVICES
 A Division of Halliburton Company

INVOICE NO.	DATE
394941	08/27/1998

WELL LEASE NO./PROJECT		WELL/PROJECT LOCATION		STATE	OWNER
PRATER 1		KIOWA		KS	SAME
SERVICE LOCATION	CONTRACTOR	JOB PURPOSE			TICKET DATE
PRATT	MALLARD DRILLING	SHOWN BELOW			08/27/1998
ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO.
46989	SHANE SUMMERS			COMPANY TRUCK	45605

OIL PRODUCERS INC. OF KANSAS
 C/O MR. BRAD SIROKY
 1003 S. PEARL
 PRATT, KS 67124-8195

DIRECT CORRESPONDENCE TO:

P O BOX 963
 PRATT KS 67124
 316-672-5593

Handwritten notes:
 RAVIN
 8/27/98
 100

REFERENCE NO.	DESCRIPTION	QUANTITY	UM	UNIT PRICE	AMOUNT
	JOB PURPOSE SUBTOTAL				8,438.71
	INVOICE SUBTOTAL				8,438.71
	DISCOUNT-(BID)				2,784.73-
	INVOICE BID AMOUNT				5,653.98
	*-KANSAS STATE SALES TAX				170.57
	*-PRATT COUNTY SALES TAX				34.82
INVOICE TOTAL - PLEASE PAY THIS AMOUNT					85,859.37

ORDER NO. 10900

TERMS: If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If customer has an approved open account, invoices are payable on the twentieth day after date of invoice. Customer agrees to pay interest of any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, plus all collection and court costs.



CHARGE TO: **OIL PRODUCERS OF KANSAS INC**
 ADDRESS: **210 MK. BRAD SIKOFY**
1003 S. PEARL
 CITY, STATE, ZIP CODE: **PRAT KS: 67124-8195**

CUSTOMER COPY

TICKET

No.

394941-8

ORIGINAL

PAGE 1 OF 1

1. SERVICE LOCATIONS PRAT KS	WELL/PROJECT NO. 1	LEASE RADER	COUNTY/PARISH KIOWA	STATE KS	CITY/OFFSHORE LOCATION	DATE 8-27-98	OWNER SAME
2. TICKET TYPE <input type="checkbox"/> SERVICE <input type="checkbox"/> SALES	NITROGEN JOB? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	CONTRACTOR MALLARD DRILL	RIG NAME/NO.	SHIPPED VIA OT	DELIVERED TO WELL SITE	ORDER NO.	
3. WELL TYPE OT	WELL CATEGORY 01	JOB PURPOSE 035	WELL PERMIT NO. AP115099214330000	WELL LOCATION 15-295-20W			
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

JOB PURPOSE	PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		UNIT PRICE	AMOUNT
			LOC	ACCT	DF		UOM	UOM		
	000-117		1			MILEAGE	50	MI	3.65	182.50
	000-119		1			MILEAGE AREA	50	MI	2.15	107.50
	001-011		1			PUMP CHANGE	4	HR	5197.74	24790.96
	018-303		1			CLARKFIX II	2	gal	33.90	67.80
	018-315		1			MUD FLUSH	500	gal	.80	400.00
	12A	825-201	1			GUIDE SHOE 4 1/2"	1	EA	105.00	105.00
	24A	815-19101	1			INSERT FLOAT 4 1/2"	1	EA	110.00	110.00
	27	815-19113	1			AUTO FILLING ASSM.	1	EA	60.00	60.00
	593	801-0373	1			LATCH DOWN PLUG 4 1/2"	1	EA	184.00	184.00
	594	801-03734	1			LATCH DOWN BAFFLE	1	EA	116.00	116.00
	40	800-60004	1			CENTRALIZERS 4 1/2"	5	EA	59.00	295.00
			1			Bulk Ticket # 100396				4496.31

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.

X [Signature]
 DATE SIGNED: **8-27-98** TIME SIGNED: **09:30**
 A.M. P.M.
 do do not require IPC (Instrument Protection). Not offered

TYPE LOCK	SUB SURFACE SAFETY VALVE WAS: <input type="checkbox"/> PULLED & RETURN <input type="checkbox"/> PULLED <input type="checkbox"/> RUN			PAGE TOTAL 8438.71
BEAN SIZE	TYPE OF EQUALIZING SUB.	CASING PRESSURE		FROM CONTINUATION PAGE(S)
DEPTH	TUBING SIZE	TUBING PRESSURE	WELL DEPTH	
SPACERS	TREE CONNECTION	TYPE VALVE		SUB-TOTAL APPLICABLE TAXES WILL BE ADDED ON INVOICE

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

CUSTOMER OR CUSTOMER'S AGENT (PLEASE PRINT)	CUSTOMER OR CUSTOMER'S AGENT (SIGNATURE)	HALLIBURTON OPERATOR/ENGINEER Michael J. Boland 50848	EMP #	HALLIBURTON APPROVAL
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ORIGINAL



Halliburton Energy Services

DATE:08-26-1998 TIME:19:56:30 SERVICE TICKET: 394941
PRATT-25555 BULK TICKET ONLY: 100396

JOB PURPOSE:LONG STRING
COMPANY TRUCK::7488 DRIVER: B.JOHNSON

CUSTOMER: OIL PRODUCERS OF KS INC LEASE & WELL#:RADER #1

504-308	STANDARD CEMENT	100	SKS.	12.13	1213.00
504-130	POZMIX-A CEMENT	25	SKS.	8.23	205.75
507-918	GASSTOP	25	LBS.	41.30	1032.50
507-775	HALAD-322	71	LBS.	7.70	546.70
509-968	W/W SALT	950	LBS.	0.18	171.00
507-970	D-AIR	50	LBS.	4.27	213.50
508-291	GILSONITE	500	LBS.	0.58	290.00
508-127	EA-2	5	SKS.	28.00	140.00

500-207 SERVICE CHARGES 156 CU FT 1.66 258.96
TOTAL 4071.41

500-306 WEIGHT: 13597 MILES: 50 TON MILES: 339.92 1.25 424.90
TOTAL BOOK PRICE OF BULK TICKET: \$ 4496.31

500-225 RETURN SERVICE CHARGES _____ CU FT 1.66

500-306 WEIGHT: _____ RETURN MILES: 50 TON MILES: _____ 1.25

Vertical stamp: RECEIVED...
\$ 4496.31

ORIGINAL

MALLARD JV, Inc.
DRILLING CONTRACTORS

P. O. Box 1009
McPHERSON, KS 67460

316-241-4640

Drillers Log

OPERATOR: **Oil Producers, Inc. of Kansas**
P. O. Box 8647
Wichita, KS 67208

WELL: **Rader #1**

API #: 15-097-21433-0000

COMMENCED: August 17, 1998

LOCATION: C SW
1320' FSL, 3960' FEL
Section 15, Township 29 S, Range 20 W
Kiowa County, KS

COMPLETED: August 27, 1998

TOTAL DEPTH: 5200'

ELEVATION: 2388' GL, 2393' KB

STATUS: Set Casing - Mississippi Formation

SPUD: 5:05 pm 8/17/98

SIZE HOLE DRILLED: 12-1/4" x 639'

SURFACE CASING SIZE: 8-5/8" x 25# x 630.93' (15 jts.)

SET AT: 637.53'

CEMENT: 200 sacks 60/40 ALW, 2% cc

ADDITIONAL CEMENT: 75 sacks class "A", 2% cc, 2% gel

SIZE HOLE DRILLED: 7-7/8" x 5200' RTD

PRODUCTION CASING: 4-1/2" x 10.5# x 5304.87' (131 jts.)

SET AT: 5199'

CEMENT: 100 sacks EA-2

PD: 10:45 am 8/12/98

DRILL STEM TESTS: 1

ELECTRIC LOG: Yes

RESERVE PIT: No free fluid

1998 OCT 23 P 12:13
KANSAS OIL & GAS

ORIGINAL

OIL PRODUCERS INC., OF KS.
INITIAL COMPLETION REPORT

WELL - RADER #1

LEGAL - C-SW/4 OF 15-29s-20w IN KIOWA CO. KS.

API# - 15-097-21,433

G.L. - 2388'

K.B. - 5' ABOVE G.L. @ 2393'

SURFACE CSN - 8 5/8" @ 638' WITH 275 SX

RTD - 5200'

LTD - 5198' (ELI 8/25/98)

PRODUCTION CASING - 4 1/2", 10.5# @ 5197' WITH 100 SX EA-2.

TOP OF CEMENT - 4598' (WITH EXCELLENT CEMENT BONDING)

PBTD - 5144' (ELI 9/1/98), 5166' (BY TBG TALLY 9/3/98)

PERFORATIONS MISS DOLOMITE-----5104'-5109' 4 SHOTS/FT. 9/2/98
 MISS DOLOMITE-----5112'-5118' 3 SHOTS/FT. 9/2/98
 MISS DOLOMITE-----5120'-5124' 4/SHOTS/FT. 9/2/98

ACID 1000 GALS 15% DSFE ACID @ 4 BPM - 250#
 4000 GALS 15% SGA ACID AND 4000 GALS 25# GELLED WATER. PAD ACID STIMULATION.

TUBING RAN - 15' MUD ANCHOR, SEATING NIPPLE, 165 JTS. 2 3/8" (5143.18')

TUBING SET@ - 5162.48' (SET 4' OFF BOTTOM 9/5/98)

AVER. TBG JT. - 30.88'

PUMP RAN - 2" X 1 1/2" X 14' RWTC WITH 6' GAS ANCHOR

RODS RAN - PUMP, 2', 110 - 3/4" RODS, 95 - 7/8" RODS, 4', P.R.

PUMP SET@ - 5147.28'

PUMPING UNIT - KINCAID 160 WITH 74" STROKE, SERIAL # - 160-85063

ENGINE - CONTINENTAL C-96 SERIAL # - 108446

TANK BATTERY - 6' X 15' HEATER TREATER, McDONALD SERIAL # 1840
 2 - 10' X 12' 200 BBL STEEL STOCK TANKS
 8' X 16' 200 BBL FIBERGLASS WATER TANK
 VERTICAL SEPARATOR AND LINE HEATER UNIT, SKID MOUNTED
 SEPARATOR 500# WP WITH MANUAL DUMP.

RELATIVE
ASAS OIL CO. INC.
NOV 01 23 1998

ORIGINAL

9/3/98

SICP - 1200 psi.

SBHP - CALCULATES 1402 psi (ASSUMING NO FLUID FILL-UP. THIS IS PESSIMISTIC)
BLOW WELL DOWN.

HALLIBURTON ON LOCATION TO RE-ACIDIZE MISS DOLOMITE PERFS WITH 4000 GALS 15% SGA ACID AND 4000 GALS 25# GELLED WATER TO MAKE UP PAD ACID STIMULATION TREATMENT.

RE-ACIDIZE MISS DOLOMITE PERFS AS FOLLOWS:

PUMP 1000 GALS 15% SGA ACID, DISPLACE THIS STAGE @ 9 BPM - 70 psi.
PUMP 1000 GALS 25# GELLED WATER, DISPLACE THIS STAGE @ 9 BPM - VAC.
PUMP 1000 GALS 15% SGA ACID, DISPLACE THIS STAGE @ 9 BPM - 120 psi
PUMP 1000 GALS 25# GELLED WATER, DISPLACE THIS STAGE @ 9 BPM - VAC.
PUMP 1000 GALS 15% SGA ACID, DISPLACE THIS STAGE @ 9 BPM - 100 psi.
PUMP 1000 GALS 25# GELLED WATER, DISPLACE THIS STAGE @ 9 BPM - 380 psi.
PUMP 1000 GALS 15% SGA ACID, DISPLACE THIS STAGE @ 9 BPM - 490 psi.
PUMP 1000 GALS 25# GELLED WATER, DISPLACE THIS STAGE @ 9 BPM - 700 psi.

FLUSH WITH 80 BBLS FIELD BRINE.

ISIP - 600 psi, VAC - 3 MINUTES.

TOTAL LOAD - 270 BBLS.

KIOWA WELL SERVICE RIGGED TO RUN PRODUCTION TUBING.

RAN PRODUCTION TUBING AS FOLLOWS:

MUD ANCHOR X 2 3/8"	15.20'
SEATING NIPPLE X 2 3/8"	1.10'
165 JTS. 2 3/8" TUBING. USED TESTED.	5142.18'
K.B. (5' < 2' ABOVE G.L.)	3.00'
TUBING SET @	5161.48'
SEATING NIPPLE SET @	5146.28'

TAGGED TOTAL DEPTH (BY TBG TALLY) @ 5166.48'. PICKED UP & SET TBG 5' OFF BOTTOM.

KIOWA WELL SERVICE RIGGED UP 2 3/8" TUBING SWAB AND PREPARED TO SWAB BACK ACID LOAD AND TEST MISS PERFS AFTER RE-ACIDIZATION.

COULD NOT GET BELOW 1500' WITH TUBING SWAB APPARENTLY DUE TO PARAFFIN.
SHUT DOWN FOR DAY. COULD NOT FIND ANY AVAILABLE HOT OIL UNITS.

9/4/98

GREENSBURG OILFIELD SERVICE ON LOCATION WITH HOT OIL UNIT AND 30 BBLS WATER. PUMPED 10 BBLS HOT WATER VIA TBG. THEN PUMPED 2 3/8" TBG SWAB TO SEATING NIPPLE. PULLED TBG SWAB OUT OF HOLE AND ATTEMPTED TO GO BACK TO BOTTOM COULD NOT. REPEATED PROCEDURE SEVERAL TIMES WITHOUT SUCCESS OF TUBING SWABBING WITHOUT ASSISTANCE FROM PUMP TRUCK.

NOTE: DID NOT PUMP ANY FLUID IN HOLE THAT WAS NOT SWABBED BACK.

DECISION MADE TO PULL TUBING OUT OF HOLE AND REPLACE TUBING WITH HUB CITY MACHINED TUBING.

JW TRUCKING ON LOCATION WITH 166 JTS OF YELLOW BAND HUB CITY MACHINED TUBING. SHUT DOWN FOR THE NIGHT.

9/5/98

KIOWA WELL SERVICE RIGGED TO RUN PRODUCTION TUBING.

REC'D BY
HUB CITY
COMP. CO., INC.
SEP 23 12 14

ORIGINAL

9/5CONT.

RAN TUBING AS FOLLOWS:

MUD ANCHOR X 2 3/8"	15.20'
SEATING NIPPLE X 2 3/8"	1.10'
165 JTS. 2 3/8" YELLOW BAND TUBING	5143.18'
K.B. (5' < 2' ABOVE G.L.)	<u>3.00'</u>
<u>TUBING SET @</u>	5162.48'
SEATING NIPPLE SET @	5147.28'

KIOWA RIGGED UP 2 3/8" TUBING SWAB TO SWAB BACK MISS AFTER RE-ACID.
 SWAB BACK 125 BBLs FOR THE DAY. HAD STRONG GAS BLOW AND GOOD SHOW OF OIL.
 CASING PRESSURE @ END OF DAY 740 psi.
 SHUT DOWN FOR THE WEEKEND.

9/6/98

JAMES GREY ON LOCATION.
 SICP - 1250 psi, SITP - NOT AVAILABLE.
 OPEN TUBING UP. WELL STARTED FLOWING.
 FLOW TO PIT FOR 1 HR. STRONG GAS, VOLUMES NOT AVAILABLE, 40% OIL.
 SHUT WELL IN FOR WEEKEND.

9/8/98

SICP - 1250 psi, SITP - 650 psi, SBHP - CALCULATES 1450 psi. (ASSUMING NO FLUID FILL-UP)
 OPEN TUBING TO PIT AND WELL KICKED OFF FLOWING.

CONTINUE TESTING MISS AFTER RE-ACID AS FOLLOWS:

- 1 HR. FLOW TO PIT - FLUID VOLUME NOT AVAILABLE, GOOD SHOW OIL AND STRONG GAS.
 - 1 HR. FLOW TO TANK - RECOVERED 27 BBLs, 39% OIL, 750 psi FCP, GAS VOLUME NOT AVAILABLE.
 - 1 HR. FLOW TO TANK - RECOVERED 18 BBLs, 51% OIL, 700 psi FCP, TEST GAS @ 1012 MCFPD.
 - 1 HR. FLOW TO TANK - RECOVERED 20 BBLs, 60% OIL, 650 psi FCP, TEST GAS @ 725 MCFPD.
 - 1 HR. FLOW TO TANK - RECOVERED 20 BBLs, 57% OIL, 600 psi FCP, TEST GAS @ 817 MCFPD.
 - 1 HR. FLOW TO TANK - RECOVERED 14 BBLs, 50% OIL, 550 psi FCP, TEST GAS @ 773 MCFPD.
 - 1 HR. FLOW TO TANK - RECOVERED 16 BBLs, 53% OIL, 520 psi FCP, TEST GAS @ 817 MCFPD.
 - 1 HR. FLOW TO TANK - RECOVERED 14 BBLs, 54% OIL, 520 psi FCP, TEST GAS @ 817 MCFPD.
- SHUT DOWN FOR THE NIGHT.

9/9/98

SICP - 1200 psi, SITP - 400 psi. BLOW WELL DOWN.
 GREAT PLAINS ON LOCATION WITH KILL TRUCK. PUMP 25 BBLs 2% KCL WATER VIA TBG TO KEEP
 WELL QUIET IN ORDER TO RUN RODS.
 JW TRUCKING ON LOCATION WITH NEW 3/4 & 7/8" RODS, WITH BOTTOM HOLE PUMP & MISC.

KIOWA RIGGED TO RUN BOTTOM HOLE PUMP AND RODS.

RAN BOTTOM HOLE PUMP & RODS AS FOLLOWS:

2" X 1 1/2" X 14' RWTC PUMP WITH 6' GAS ANCHOR	16.00'
2' X 3/4" ROD SUB	2.00'
110 - NEW 3/4" RODS	2750.00'
95 - NEW 7/8" RODS	2375.00'
4' X 7/8" ROD SUB	4.00'
1 1/4" X 16' POLISHED ROD	<u>16.00'</u>
<u>PUMP SET @</u>	5147.28'

13 001 23 0 12 14
 ...AS COMP SC...

ORIGINAL

9/9CONT.

KIOWA WELL SERVICE SEATED PUMP, LONG STROKED WELL WITH GOOD PUMP ACTION.
CLAMPED RODS OFF. CLOSED WELL IN.
RIGGED DOWN & MOVED OFF LOCATION.

9/10/98

KRIER DOZER ON LOCATION, BUILT PUMPING UNIT GRADE, AND BUILT TANK BATTERY GRADE
TO SE OF WELL ON EAST LINE OF SECTION @ 1/2 MILE POINT.

GABEL LEASE SERVICE ON LOCATION & DELIVERED PUMPING UNIT AND ENGINE PURCHASED
FROM A&W SUPPLY.

SET PUMPING UNIT - KINCAID 160 WITH 74" STROKE, SERIAL # - 160-85063
WITH CONTINENTAL C-96 USED ENGINE SERIAL # - 108446

STREMMEL AND JW TRUCKING ON LOCATION WITH TANK BATTERY AND SEPARATOR.

SET TANK BATTERY AS FOLLOWS:

SET 6' X 15' McDONALD HEATER TREATER FROM COONFIELD LEASE
SET 2 - 10' X 12' 210 BBL STEEL STOCK TANKS FROM COONFIELD LEASE
SET 8' X 15' 200 BBL FIBERGLASS WATER TANK FROM EINSEL LEASE
SET VERTICAL SEPARATOR 500# WP WITH MANUAL DUMP AND LINE HEATER COMBO UNIT SKID
MOUNTED FROM TRUBY-B LEASE.

9/11/98

GABEL LEASE SERVICE ON LOCATION & MET WITH NNG TO LOCATE AND DIG UP 5 GAS LINES
NEEDED TO CROSS WITH LEAD LINE.

RAINBOW DELIVERED APPROX 2200' OF 2 7/8" TUBING TO BE USED AS LEAD LINE.

9/12/98

GABEL TRENCHED AND LAYED APPROX 2200' 2 7/8" STEEL TUBING LEAD LINE.
HOOKED UP LEAD LINE, HOOKED UP WELL HEAD, AND HOOKED UP GAS SUPPLY TO ENGINE.

STREMMEL ON LOCATION TO FINISH HOOKING UP TANK BATTERY.

SHANE SUMMERS MET WITH SCOTT D. BROWN (LANDOWNER OF N/2 OF 16-29s-20w)
IN REGARDS TO PURCHASING THE ABANDONED 4" WELDED STEEL GAS LINE RUNNING FROM THE
SE CORNER OF THE N/2 OF SECTION-16 TO THE NW CORNER OF THE N/2 OF SECTION-16.
WE PURCHASED THAT LINE FOR THE AMOUNT OF \$8000.00 AND IN ADDITION LEASED THE N/2 OF
SECTION 16-29s-20 WEST OF KIOWA CO. AT THE SAME TIME FOR \$5/ACRE.

WE WILL TIE OUR RADER LEASE INTO THIS LINE AND KGS WILL TIE THE NW END OF OUR LINE
INTO THEIR SYSTEM AS SOON AS POSSIBLE AT WHICH POINT THIS WELL WILL BE PUT INTO
SERVICE.

END OF REPORT

BRAD SIROKY

RECEIVED
KANSAS CORP. OCT 14 1998

15-097-21433

Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530

(316) 792-6902

ORIGINAL

Date 8-26-1998 Location C 4/2 15-29° 20' W Elevation 2398 BL. County kiowa

Company Oil Producers Inc of Kansas Number of Copies 5

Charts Mailed to P.O. box 8647 Wichita Kansas 67208

Drilling Contractor Mallard J.V. Inc.

Length Drill Pipe 4835 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" X.H.

Length Weight Pipe NONE I.D. Weight Pipe NONE Tool Joint Size NONE

Length Drill Collars 246 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X.H.

Top Packer Depth 5095 Bottom Packer Depth 5100 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 5100 TO 5130 ANCHOR LENGTH 30 TOTAL DEPTH 5150 Hole Size 7 7/8"

LEASE & WELL NO. RADER #1 FORMATION TESTED MISSISSIPPI TEST NO. 1

Mud Weight 91 Viscosity 52 Water Loss 12 Chlorides - Pits 12000 D.S.T.

Maximum Temp. 128 °F Initial Hydrostatic Pressure (A) 2487 P.S.I. Final Hydrostatic Pressure (H) 2468 P.S.I.

Tool Open I.F.P. from 1:40 AM to 2:05 AM 25 min

Tool Closed I.C.I.P. from 2:05 AM to 2:35 AM 30 min

Tool Open F.F.P. from 2:35 AM to 3:35 AM 60 min

Tool Closed F.C.I.P. from 3:35 AM to 5:05 AM 90 min

Initial Blow Strong blow - Gas to surface in 3 minutes - see Gas Flow Report

Final Blow Strong blow

Total Feet Recovered 825 Gravity of Oil 36 1/2 Corrected

585 Feet of CLEAN Gassy oil % Gas _____ % Oil _____ % Mud _____ % Water _____

240 Feet of MUDDY Gassy oil % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____

Remarks _____

Extra Equipment - Jars NONE Safety Joint NONE Extra Packer NONE Straddle NONE Hook Wall NONE

Top Recorder No. 5463 Clock No. 47441 Depth 45124 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 13189 Clock No. 47442 Depth 5107 Insurance NONE

Price of Job _____

Tool Operator Gene Sudig

Approved By _____

No 13840

from [B]	<u>439</u>	P.S.I. to [C]	<u>419</u>	P.S.I.
[D]	<u>1525</u>			P.S.I.
from [E]	<u>390</u>	P.S.I. to [F]	<u>351</u>	P.S.I.
[G]	<u>1497</u>			P.S.I.

Superior Testers Enterprises, Inc. shall not be liable for damage of any kind to the property or personnel of the one for whom a test is made, of 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.

Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530

(316) 792-6902

GAS FLOW REPORT

Date 8-26-1998 Ticket # 13840 Company Oil Producers Inc. of Kansas
 Well Name and No. RADER #1 DST No. 1 Interval Tested 5100-5130
 County IOWA State KANSAS Sec. 15 Twp. 29^S Rg. 20^W

Time Gauge Pre-Flow	Time Gauge in Min.	Inches of Water on Orifice Well Tester	Inches of Mercury on Orifice Well Tester	P.S.I. on Orifice Well Tester	P.S.I. on Pitot Tester	Choke Size	Gas Rate MCF
PRE FLOW							
<i>Tool OPENED AT 1:40</i>							
<i>1:43 Gas to Surface</i>							
<i>1:45</i>	<i>5</i>	<i>8</i>		<i>5</i>		<i>1 1/2</i>	<i>863.</i>
<i>1:55</i>	<i>15</i>	<i>10</i>		<i>10</i>		<i>1 1/2</i>	<i>1,274.</i>
<i>2:05</i>	<i>25</i>	<i>11</i>		<i>11</i>		<i>1 1/2</i>	<i>1,348.</i>
<i>Tool CLOSED AT 2:05</i>							

SECOND FLOW							
<i>2:35</i>	<i>Tool OPENED</i>						
<i>2:45</i>	<i>10</i>			<i>8</i>		<i>1 1/2"</i>	<i>1,123.</i>
<i>2:55</i>	<i>20</i>			<i>8</i>		<i>1 1/2"</i>	<i>1,123.</i>
<i>3:05</i>	<i>30</i>			<i>7</i>		<i>1 1/2"</i>	<i>1,036</i>
<i>3:15</i>	<i>40</i>			<i>6</i>		<i>1 1/2"</i>	<i>953</i>
<i>3:25</i>	<i>50</i>			<i>5</i>		<i>1 1/2"</i>	<i>863</i>
<i>3:35</i>	<i>60</i>			<i>4 1/2</i>		<i>1 1/2"</i>	<i>814</i>
<i>3:35</i>	<i>Tool Closed</i>						

GAS BOTTLE

Serial No. _____ Date Bottle Filled _____ Date to be Invoiced _____ Test Ticket # _____

Requisition and Provisions for high pressure steel gas bottles. Superior Testers Enterprises, 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 Superior Testers Enterprises, Inc. within thirty (30) days free of charge or be invoiced in the amount of \$125.00 (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 _____

Authorized by _____

SUPERIOR TESTERS ENTERPRISES INC.

Great Bend, Kansas

CHART DATA

(316) 792-6902

RADER #1 MISSISSIPPI

State KANSAS

Test Date August 26, 1998

County

Sec Town Range C-S/W 15-29S-20W

Field

Report Number 13840



Field Reading

Office Reading

	Field Reading	Office Reading	
(A)	Initial Hydrostatic Pressure	2487	2497 psi
(B)	Initial Flow Pressure	439	440 psi
(C)	Final Initial Flow Pressure	419	432 psi
(D)	Initial Shut-In Pressure	1525	1540 psi
(E)	Initial Final Flow Pressure	390	389 psi
(F)	Final Flow Pressure	351	374 psi
(G)	Final Shut-In Pressure	1497	1513 psi
(H)	Final Hydrostatic Pressure	2468	2465 psi

ELECTRONIC REECORDER DEPTHft, RECORDER NUMBER 78225

Company: OIL PRODUCERS INC. OF KANSAS Lease & Well No. RADER #1 Test #: 1 Date: 8-26-1998
SEC. 15 TWP. 29S RGE. 20W

SUPERIOR TESTERS ENTERPRISES INC.

DRILL STEM TEST REPORT

GREAT BEND, KANSAS (316)792-6902

General Information

Test Company Name SUPERIOR TESTERS ENTERPRISES INC.
 Company Name OIL PRODUCERS INC. OF KANSAS
 Lease and Well Number RADER #1
 Formation Tested MISSISSIPPI
 Test Number 1
 State KANSAS
 County KIOWA
 Field
 Test Date 26-Aug-98
 Section Town Range C-SW 15-29S-20W
 Report Number 13840
 Elevation Ground Level 2388
 Elevation Kelly Bushings 2393
 Company Representative BILL SHEPARD
 Testing Engineer GENE BUDIG

Extra Equipment

Jars NO
 Safety Joint NO
 Extra Packs No
 Straddle No
 Hook Wall No
 Sampler No
 Circulating Sub No
 Electronic Recorder NO

Well Information

Drilling Contractor MALLARD J.V. INC.

 Drill Pipe Length 4835
 Drill Pipe I.D. 3.8
 Tool Joint Size 4 1/2 XH

 Weight Pipe Length
 Weight Pipe I.D. 2.76
 Tool Joint Size 4 1/2 X.H.

 Drill Collar Length 246
 Drill Collar I.D. 2.25
 Tool Joint Size 4 1/2 X.H.

 Mud Weight #/gal 9.10
 Viscosity 52.00
 Water Loss 12
 Chlorides - Pits 12,000
 Chlorides - DST

SUPERIOR TESTERS ENTERPRISES INC.
DRILL STEM TEST REPORT

GREAT BEND, KANSAS (316)792-6902

Tool Setting Information

Top Packer Depth 5096
Bottom packer Depth 5100
Number of Packers 2
Packer Size 6 3/4

Test Interval (from) 5100
Test Interval (to) 5130.00
Anchor Length 30
Total Depth (ft) 5130
Hole Size (in) 7 7/8

Pressure Readings

	<i>Field Reading</i>	<i>Office Reading</i>
Maximum Temp 128		
Initial Hydrostatic Pressure 2487		2497
Initial Flow Pressure 439		440
Final Initial Flow Pressure 419		432
Initial Shut-In Pressure 1525		1540
Initial Final Flow Pressure 390		389
Final Flow Pressure 351		374
Final Shut-In Pressure 1497		1513
Final Hydrostatic Pressure 2468		2465
Electronic Recorder Depth		
Recorder Number 78225		
Mechanical Recorder Depth		
Recorder Number 5463		

Comments

[Empty box for comments]

SUPERIOR TESTERS ENTERPRISES INC.

DRILL STEM TEST REPORT

GREAT BEND, KANSAS (316)792-6902

Flow Times

Initial Open

Tool Open (from) 1:40
 Tool Open (to) 2:05
 Duration (min) 25

Initial Shut-in

Tool Closed (from) 2:05
 Tool Closed (to) 2:35
 Duration (min) 30

Final Open

Tool Open (from) 2:35
 Tool Open (to) 3:35
 Duration (min) 60

Final Shut-in

Tool Closed (from) 3:35
 Tool Closed (to) 5:05
 Duration (min) 90

Recovery Description

Initial Blow STONG BLOW-GAS TO SURFACE IN 3 MINUTES-
 SEE GAS FLOW REPORT

Final Blow STRONG BLOW

Description	Feet of Recovery	% Gas	% Oil	% Mud	% Water
1) CLEAN GASSY OIL -GRAVITY 36 1/2 CORRECTED	585				
2) MUDDY GASSY OIL	240				
3)					
4)					
5)					
6)					
7)					
8)					
9)					
10)					
11)					
12)					
13)					
14)					
15)					
Total	825				

SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND, KANSAS

GAS FLOW RATE

(316) 792-6902

RADER #1 MISSISSIPPI

STATE.....	KANSAS	Test Date	August 26, 1998
COUNTY.....	KIOWA	Sec Town Range	C-SAN 15-29S-20W
FIELD.....	0:00	Report Number	13840

Initial Flow

Comments	Time (hh:mm:ss)	Period dt (min)	Inches H2O Orifice Tester	PSI on Orifice Tester	PSI on Pitot Tube	Choke Size (in)	Gas Rate (MCF/Day)
TOOL OPENED	1:45	5		5		1 1/2	863.000
AT 1:40	1:55	15		10		1 1/2	1274.000
WITH GAS TO SURFACE IN 3 MINUTES AT 1:43	2:05	25		11		1 1/2	1348.000

Final Flow

Comments	Time (hh:mm:ss)	Period dt (min)	Inches H2O Orifice Tester	PSI on Orifice Tester	PSI on Pitot Tube	Choke Size (in)	Gas Rate (MCF/Day)
2:35 TOOL OPENED	2:45	10		8		1 1/2	1123.000
	2:55	20		8		1 1/2	1123.000
	3:05	30		7		1 1/2	1036.000
	3:15	40		6		1 1/2	953.000
	3:25	50		5		1 1/2	863.000
	3:35	60		4 1/2		1 1/2	814.000

PVT Detail

INPUT DATA

1	Pr (psia)	565.00
2	Temperature of Interest (psia)	128.00
3	GLR (scf/bbl).....	250.00
4	Water Cut (%)	0.00%
5	Standard Pressure (psia)	14.7000
6	Standard Temperature (F)	60.0000
7	API Gravity Liq Hydrocarbon	36.5000
8	Water Salinity (ppm)	0.000E+00
9	Liq. Hydro. SOL GOR AND PB Correlation ...	STANDING
10	Liq. Hydro. FVF Correlation.	STANDING
11	Dead Oil Correlation	BEGGS-ROBINSON
12	Dead Water Correlation	MEEHAN
13	Reservoir Fluid Type	Liquid
14	Reservoir Oil Saturation (%)	35.00%
15	Reservoir H2O Saturation (%)	20.00%
16	Reservoir Gas Saturation (%)	35.00%
17	Reservoir Rock Type	SANDSTONE
18	Reservoir Rock Porosity (%)	18.00%
19	True Vertical Depth (ft)	5130
20	CO2 (Mole %)	0.000E+00
21	H2S (Mole %)	0.000E+00
22	N2 (Mole %)	0.000E+00
23	Specific Gravity Gas (dim)	0.6500
24	Pseudo Critical Temp (R)	370.0000
25	Pseudo Critical Press (psia)	671.0000
	CALCULATED VALUES	
26	Ct Reservoir (1/psi)	1.003E-03
27	Cf Wellbore (1/psi)	1.327E-03
28	Total Fluid Visc (cp)	1.3117
29	Total FVF (bbl/stb)	1.7866
30	Total Fluid Bubble Point Press (psi)	1150.2360
31	Fluid Density (lbs/r-ft3)	30.6655
32	Total Fluid SG (dim)	0.4917
33	FVF Oil (Rbl/Stb)	1.0701
34	FVF H2O (Rbl/Stb)	0.000E+00
35	FVF GAS (Scf/FT3)	0.0280
36	Mu Oil (cp)	2.1813
37	Mu H2O (cp)	N/A
38	Mu Gas (cp)	0.0131
39	Density Oil (lb/rft3)	50.1910
40	Density H2O (lb/rft3)	0.000E+00
41	Density Gas (lb/rft3)	1.5063
42	Compress. Oil (1/psi)	9.493E-04
43	Compress. H2O (1/psi)	3.529E-05
44	Compress. Gas (1/psi)	1.891E-03
45	Compress. Rock (1/psi)	1.942E-06
46	Critical Temp (R)	340.1449
47	Critical Press (psia)	677.1917
48	Oil Vol Frac of Total Fluid (frac)	0.5989
49	Water Vol Frac of Total Fluid (frac)	0.000E+00
50	Gas Vol Frac of Total Fluid (frac)	0.4011
51	Dissolved Gas/Oil Ratio (Scf/Stb oil)	106.1576
52	Dissolved Gas/H2O Ratio (Scf/Stb H2O)	0.000E+00
53	Free Gas/Liquid Ratio (Scf/STB Tot Liq)	143.8424
54	Gas Gravity of Free Gas (dim)	0.5520
55	Gas Gravity of Gas in Oil (dim)	0.7828
56	Gas Gravity of Gas in H2O (dim)	0.6500

INPUT DATA

Zone Thickness : 10 ft
Viscosity : 1.466 cp
Porosity : 18.00 %
Total Compressibility : 1.003E-03 1/psi
Wellbore Radius : 3.208 ft
Rate During Period : 0.000
Rate Prior to Period : 84.540
Formation Volume Factor (B) : 1.124 Rbl/Stb

RATE HISTORY

<u>DATE</u>	<u>TIME</u>	<u>ET (hrs)</u>	<u>Pressure (psi)</u>	<u>RATE</u>	<u>Comments</u>
08/26/98	01:45:20	.0889	430.0000	28.1800	1ST FLOW
08/26/98	02:05:20	.4222	432.0000	0.0000	END FLOW
08/26/98	02:35:20	.9222	1540.0000	0.0000	1ST SHUT-IN
08/26/98	02:40:20	1.0056	384.0000	84.5400	2ND FLOW
08/26/98	03:35:00	1.9167	374.0000	0.0000	END FLOW
08/26/98	05:07:20	3.4556	1513.0000	0.0000	2ND SHUT-IN

MODEL RESULTS

WBS Model : Constant Storage

Storage Coeff. (C1) : 2.000E-4 bbl/psi

Dimensionless Storage (CD) : 0.010 DIM

CD1 : 0.010 DIM

Near Well Model : Skin Model

Skin : 4.87

Reservoir Model : Homogeneous

Permeability : 9.447 md

User Input PI (psia) : 0.00

Back Calculated PI (psia) : 1540.5830

Time Match (TD/dt) : 0.9148

Pressure Match (PD/dp) : 0.0048

Boundary Model : No Boundaries

SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND, KANSAS

SUPERPOSITION ANALYSIS

(316) 792-6902

1ST SHUT-IN

State KANSAS

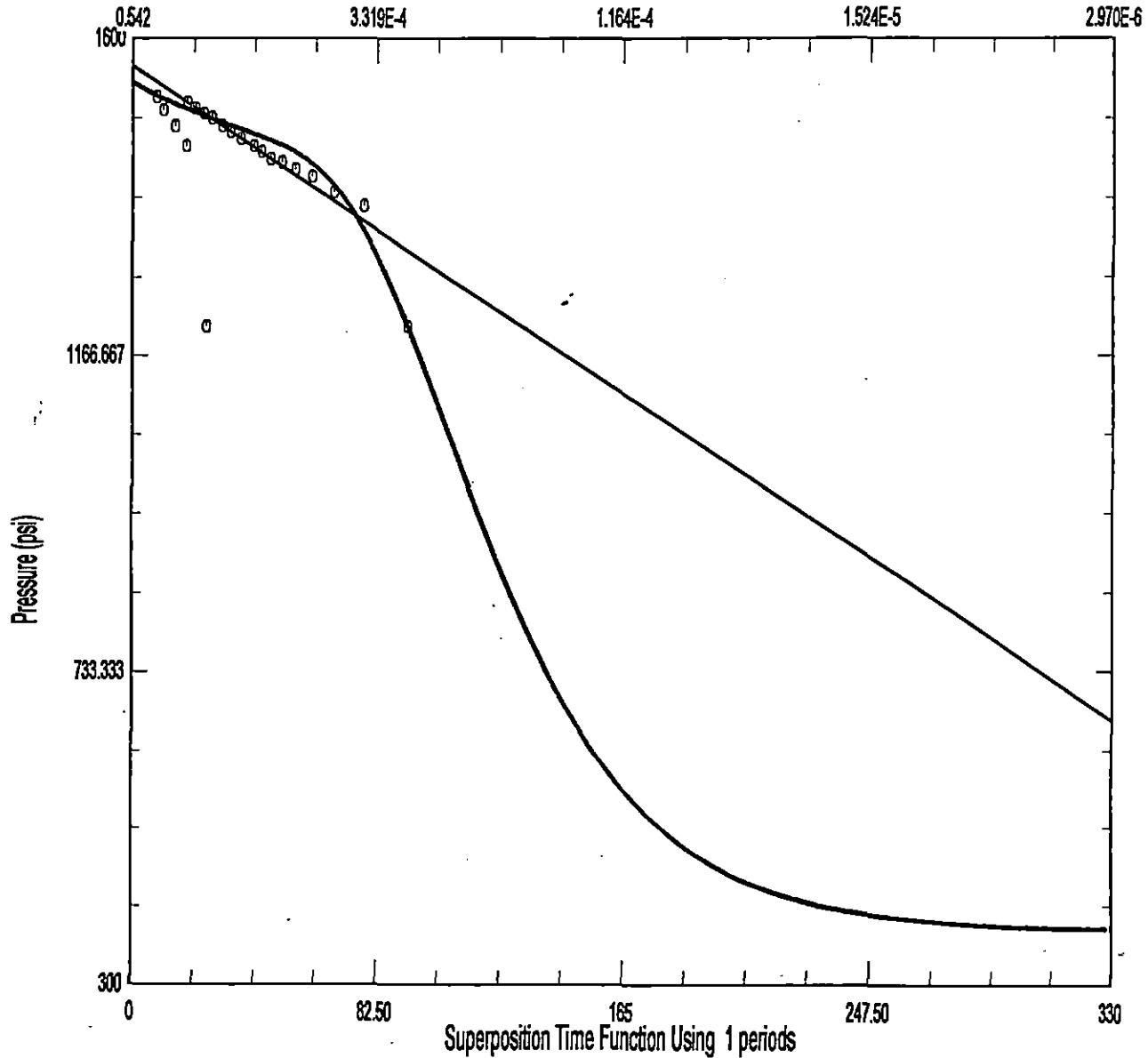
Test Date August 26, 1998

County KIOWA

Sec Town Range C-S/W 15-29S-20W

Field

Report Number 13840



Field :
County or Parish :
State :

Date : 27-Aug-98 10:04:12
Analysis Period : END FLOW - 1ST SHUT-IN
Identifier : Line #

Superposition Slope -> m' -7.136337
Horner Slope -> m -201.101985
Intercept 1579.834
P(dt=1 hr) 1554.711
Pwf 432.000
R Sqr 0.9846

k (md) 4.52523
kh (md-ft) 45.25230
k/u (md/cp) 4.38152
kh/uB (md-ft/cp) 22.78480

Skin 5.649
DP Skin 988.360
Total DP 1147.834
Percent DP 86.11%

Radius Invest (ft) 6
Radius Time (hrs) 0.45

Delta Q = 28
h (ft)= 10
mu = 1.033
B = 1.923

First Point # 3
Second Point # 10
Start Real Time 0.100
End Real Time 0.450
Start SF Time 17.943

SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND, KANSAS

SUPERPOSITION ANALYSIS

(316) 792-6902

2ND SHUT-IN

State KANSAS

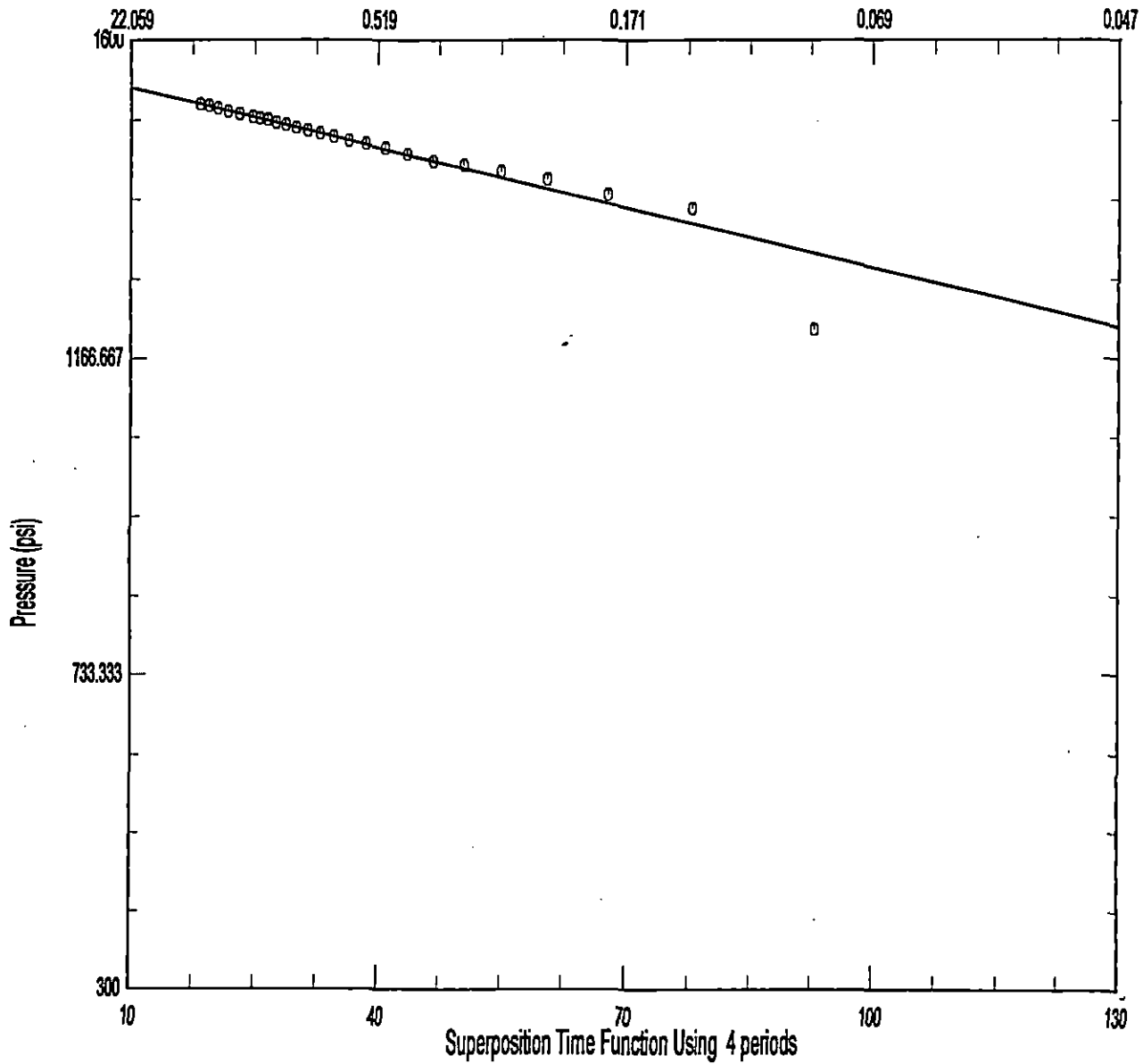
Test Date August 26, 1998

County KIOWA

Sec Town Range C-S/W 15-29S-20W

Field

Report Number 13840



Field :
County or Parish :
State :

Date : 27-Aug-98 10:47:08
Analysis Period : END FLOW - 2ND SHUT-IN
Identifier : Line #

Superposition Slope -> m' -2.719931
Horner Slope -> m -229.942957
Intercept 1562.886
P(dt=1 hr) 1494.032
Pwf 374.000
R Sqr 0.9977

k (md) 9.84792
kh (md-ft) 98.47918
k/u (md/cp) 6.71938
kh/uB (md-ft/cp) 59.78093

Skin 5.226
DP Skin 1045.400
Total DP 1188.886
Percent DP 87.93%

Radius Invest (ft) 8
Radius Time (hrs) 1.54

Delta Q = 85
h (ft)= 10
mu = 1.466
B = 1.124

First Point # 12
Second Point # 30
Start Real Time 0.583
End Real Time 1.483
Start SF Time 36.362