

**TREATMENT REPORT**  
DWL-494-F PRINTED IN U.S.A.

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

DATE **3 August 1963**

WELL NAME AND NUMBER: **Huff #1** LOCATION: **16-1s-26w** CUSTOMER REPRESENTATIVE: **DGSE 600** TREATMENT NUMBER: **03-12-2604**

POOL: **W-C** FORMATION: **L-K-C** TUBING:  A  B  C ALLOWABLE PRESSURE: **2** TBG: **1** CSG: **1**

COUNTY: **Decatur** STATE: **Kansas** TYPE OF WELL: **4** OIL:  A  B  C GAS:  WATER:  INJ.:  D

AGE OF WELL: **5** NEW WELL:  A  B REWORK:  C TOTAL DEPTH: **3276** CIRC. BHT: **1**

CUST. NAME: **Gulf Oil Corporation** ADDRESS: **600 Montague Building  
Oklahoma City 2, Oklahoma**

CASING SIZE: **4 1/2"** CASING DEPTH: **3309** TUBING SIZE: **2" FINE** TUBING DEPTH: **3275**

LINER SIZE: **—** LINER DEPTH: **—** PACKER TYPE: **—** PACKER DEPTH: **—**

OPEN HOLE: **—** CCG. OR NRL. VOL.: **34.95** TBG VOLUME: **12.62** STATIC BHT: **—**

CITY AND STATE: **Oklahoma**

REMARKS:

DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES
236	3				

FOR CONVERSION PURPOSES 24 BBLS EQUALS 1000 GALLONS

ARRIVED ON LOCATION: **2:30 PM. 8-2-63**

TIME	INJECTION		PRESSURE		LIQUID (A)	SERVICE PURPOSE	(C) PROPPING AGENT OR (D) PLUGGING SERVICE			
	RATE	BBLS IN	Tub	Annulus			FLA. (B) CONC.	TYPE	SIZE	CONC.
4:30			0		BDA	ACIDIZE				
4:34		12	0		W-27 water	flow				
4:42		32	0		W-27 water	load stop pump, load run lower, leave				
Equipment relocation.										
6:00 PM off loc. 8-2-63										
3:30 PM on loc. 8-3-63										
4:25					Water	Pressure Test lines.				
4:30			3000		Water	Test for Chances Gases				
4:42			4000		Water	Test w/c				
4:43			3800		Water	Test for bleed off Press. Test start ACID				
4:45			0	0	FLA X2	ACIDIZE				
4:47	10		200	200	FLA X2	ACIDIZE hole filled.				
4:51	13		2300	2400	FLA X2	ACIDIZE, FLA X2 ON BOTTOM				
4:58	48		2100	600	W-27 water	Flush				
5:00	61		2000	500	W-27 water	Flush, Start W-27 water down, pressure to 9				
5:04	96		400	1300	W-27 water	Flush STOP PUMP. 15 BBLS W-270/F IN				

TIME LEFT LOCATION: **6:30 PM** AVER. LIQUID INJ. RATE: **5.34** ADJ. INJ. RATE (SOLIDS INC.): **—**

MAX. PRESSURE: **2400** AVER. PRESSURE: **1500** SHUT IN PRESSURE IMMEDIATE: **600** 5 MINUTE: **500**

DOWELL LOCATION: **Hess (Hill City 74)** DOWELL ENGINEER: **Wm. Phelps**

TYPE	SIZE OR PURPOSE	AMOUNT
BDA	ACIDIZE	500
FLA X2	ACIDIZE	2000
W-27	Test water	5

(A) NOTE: SEE (AA) FOR SPECIAL ADDITIVES

MA—MUD ACID X—HCL ACID APF—ACID PETROFRAC FA—FRAC ACID BDA—BREAKDOWN ACID LO—LEASE OIL RO—REFINED OIL DO—DIESEL OIL KE—KEROSENE PJ—PETROJEL PF—PETROFRAC FW—FRESH WATER BR—BRINE

WF—WATERFRAC M41—M41 GEL ST—STRATAFRAC VR—VERSENE SSS—TRIPLE S ACID SLW—SLICK WATER SLO—SLICK OIL MUD—DRILLING MUD RX1—RETARDED ACID I RX2—RETARDED ACID II RX3—RETARDED ACID III

(AA) ADDITIVES IN FLUID (EXCEPT FLA\*)

CONC. IS GIVEN IN LBS. OR GALS. PER 1000 GALS. OF TOTAL GALS. TYPE TREATED CONC.

(B) CONC. IS GIVEN IN LBS. OR GALS. PER 1000 GALS. OF LIQUID

J97—DOWELL J97 J101—DOWELL J101 J84—DOWELL J84 J98—DOWELL J98 J99—DOWELL J99

(C) SIZE IS GIVEN IN MESH RANGE CONC. IS GIVEN IN LBS. PER GALLON OF LIQUID

S—SAND WS—WALNUT SHELLS AL—ALUMINUM NY—NYLON

(D)

FF—X830 FIXAFRAC KJ—X820 GEL DO—GELLED OIL DW—GELLED WATER RB—RUBBER BALLS NCB—NYLON CORE BALLS PB—PERMEABLE BALLS MB—MOTH BALLS RS—ROCK SALT OS—OYSTER SHELLS

CALL BACK:  DATE:  CUSTOMER REP. CONTACTED:  CUSTOMER CONSIDERED SERVICE:  SATISFACTORY:  UNSATISFACTORY:  UNKNOWN:  PROD. BEFORE TREATMENT:  TEST:  ALLOWABLE:  PROD. AFTER TREATMENT:  TEST:  ALLOWABLE:  DAYS:

**TREATMENT REPORT**

DWL-494-F PRINTED IN U.S.A.



DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

DATE

3 August 1963

WELL NAME AND NUMBER <b>Huff #1</b>	LOCATION <b>16-15-26W</b>	CUSTOMER REPRESENTATIVE	TREATMENT NUMBER <b>03-12-2604</b>
POOL <b>W-C</b>	FORMATION <b>L-K-C</b>	TUBING JOB DONE DOWN CASING ANNULUS A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/>	ALLOWABLE PRESSURE TGB: CSB:
COUNTY <b>Decatur</b>	STATE <b>Kansas</b>	TYPE OF WELL 4 OIL A <input checked="" type="checkbox"/> GAS B <input type="checkbox"/> WATER C <input type="checkbox"/> INJ. D <input type="checkbox"/>	
TYPE OF SERVICE <b>Acidizing</b>		5 AGE OF WELL NEW WELL A <input checked="" type="checkbox"/> REWORK B <input type="checkbox"/>	6 TOTAL DEPTH <b>3276</b>
CUST. NAME <b>Gulf Oil Corporation</b>	ADDRESS <b>600 Montrose Building Oklahoma City 2, Oklahoma</b>	8 CASING SIZE <b>4 1/2"</b>	9 CASING DEPTH <b>3309</b>
		10 LINER SIZE	11 LINER DEPTH
		12 OPEN HOLE	13 CSB. OR (NRL) VOL. <b>34.95</b>
		14 TBG VOLUME <b>12.62</b>	15 STATIC BHT.
PERFORATED INTERVALS			
DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES
<b>3236</b>	<b>3</b>		
REMARKS:			
FOR CONVERSION PURPOSES 24 BBLs EQUALS 1000 GALLONS			
ARRIVED ON LOCATION: <b>2:30 P.M. 8-2-63</b>			

TIME	INJECTION		PRESSURE		LIQUID (A)	SERVICE	(C) PROPPING AGENT OR (D) PLUGGING SERVICE				
	RATE	BBLs IN	Tub	Annulus			PURPOSE	FLA.—CONC.	TYPE	SIZE	CONC.
4:30			0		BDA	ACIDIZE					
4:34		12	0		W-27 water	hold					
4:42		32	0		W-27 water	hold. stop pump. hold & perforate. leave					
Equipment relocation.											
6:00 P.M. off loc. 8-2-63											
3:30 P.M. on loc. 8-3-63											
4:25					Water	Pres. Test lines.					
4:30			3000		Water	Test in Chavea Gatos					
4:42			4000		Water	Test in G					
4:43			3800		Water	Test in Blend of P Press. To start ACID					
4:45			0	0	FLA 22	ACIDIZE					
4:47	10		200	200	FLA 22	ACIDIZE hole filled					
4:51	13		2300	2400	FLA 22	ACIDIZE. FLA 22 on bottom					
4:58	48		2100	600	W-27 water	Flush					
5:00	61		2000	500	W-27 water	Flush. Start W-27 water down. stop pump.					
5:04	76		400	1300	W-27 water	Flush STOP PUMP. 15 Bbls W-270/F 15					

TIME LEFT LOCATION <b>6:30 PM</b>	AVER. LIQUID INJ. RATE <b>5.34</b>	ADJ. INJ. RATE (SOLIDS INC.) —	PROPS AND LIQUIDS INJECTED		
MAX. PRESSURE <b>2400</b>	AVER. PRESSURE <b>1500</b>	SHUT IN PRESSURE IMMEDIATE 600 5 MINUTE 500	TYPE	SIZE OR PURPOSE	AMOUNT
DOWELL LOCATION <b>Hess (Hill City 74)</b>		DOWELL ENGINEER <b>Wim Phelps</b>	BDA	ACIDIZE	500
(A) NOTE: SEE (AA) FOR SPECIAL ADDITIVES		(AA) ADDITIVES IN FLUID (EXCEPT FLA*)	FLA 22	ACIDIZE	2000
MA—MUD ACID X—HCL ACID APF—ACID PETROFRAC FA—FRAC ACID BDA—BREAKDOWN ACID LO—LEASE OIL RO—REFINED OIL DO—DIESEL OIL KE—KEROSENE PJ—PETROJEL PF—PETROFRAC FW—FRESH WATER BR—BRINE		CONC. IS GIVEN IN LBS. OR GALS. PER 1000 GALS. OF TOTAL GALS. OF TYPE TREATED CONC.	W-27	Treatment	5
WF—WATERFRAC M41—M41 GEL ST—STRATAFRAC VR—VERSENE SSS—TRIPLE S ACID SLW—SLICK WATER SLO—SLICK OIL MUD—DRILLING MUD RX1—RETARDED ACID I RX2—RETARDED ACID II RX3—RETARDED ACID III		(B) CONC. IS GIVEN IN LBS. OR GALS. PER 1000 GALS. OF LIQUID J97—DOWELL J97 J101—DOWELL J101 J84—DOWELL J84 J98—DOWELL J98 J99—DOWELL J99			
		(C) SIZE IS GIVEN IN MESH RANGE CONC. IS GIVEN IN LBS. PER GALLON OF LIQUID S—SAND WS—WALNUT SHELLS AL—ALUMINUM NY—NYLON			
		(D) FF—X830 FIXAFRAC KJ—X820 GEL DO—GELLED OIL DW—GELLED WATER RW—RUBBER BALLS NCB—NYLON CORE BALLS PB—PERMEABLE BALLS MB—MOTH BALLS RS—ROCK SALT OS—OYSTER SHELLS			

CALL BACK	DATE	CUSTOMER REP. CONTACTED	CUSTOMER CONSIDERED SERVICE	SATISFACTORY UNSATISFACTORY UNKNOWN	ROD. BEFORE TREATMENT	PROD. AFTER TREATMENT
					TEST ALLOWABLE	TEST ALLOWABLE

2 HR.  
30 M

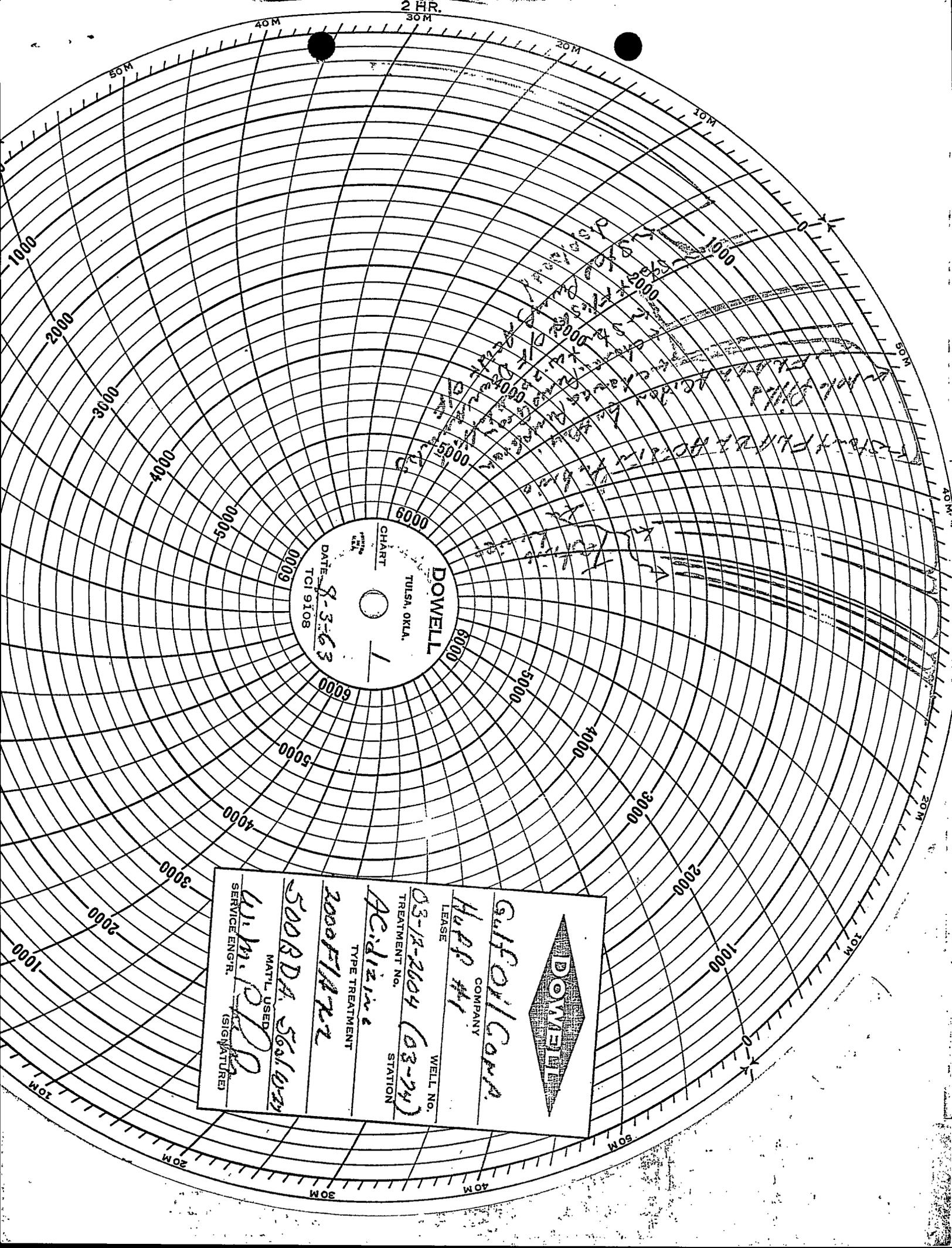


CHART  
TULSA, OKLA.  
DOWELL  
DATE 8-3-63  
TCI 9108  
0009

Handwritten notes in the upper right quadrant of the chart, including "1000", "2000", "3000", "4000", "5000", "6000" and "TULSA, OKLA.".

	
Gulf Oil Corp	
COMPANY	
LEASE	Well No.
HAPP #1	03-12-2604 (03-24)
TREATMENT NO.	STATION
Acidizine	
TYPE TREATMENT	
2000F1A22	
5008DA. 501022	
MATL USED	
W.M. P.P.	
SERVICE ENGR.	(SIGNATURE)



DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

DATE 17 Sept. 1963

TREATMENT REPORT  
DWC-494-1

WELL NAME <b>Huff</b>	LOCATION <b>16-1s-26W</b>	CUSTOMER REPRESENTATIVE <b>Tom Hinton</b>	TREATMENT NUMBER <b>03-12-2714</b>
FORMATION <b>L-K-C</b>	JOB DONE DOWN TUBING <input type="checkbox"/> A <input type="checkbox"/> CASING <input type="checkbox"/> B <input type="checkbox"/> ANNULUS <input checked="" type="checkbox"/> C	ALLOWABLE PRESSURE TBG: _____ LSG: _____	
COUNTY <b>Decatur</b>	STATE <b>Kansas</b>	TYPE OF WELL OIL <input checked="" type="checkbox"/> A GAS <input type="checkbox"/> B WATER <input type="checkbox"/> C INJ. <input type="checkbox"/> D	

068

TYPE OF SERVICE  
**Acidizing**

CUST. NAME  
**Gulf Oil Corporation**

ADDRESS  
**600 Morten Building  
Oklahoma City 2, Oklahoma**

CITY AND STATE

REMARKS:

AGE OF WELL NEW WELL <input type="checkbox"/> A REWORK <input checked="" type="checkbox"/> B	TOTAL DEPTH <b>3527</b>	CIRC. BHT.
CASING SIZE <b>4 1/2"</b>	CASING DEPTH <b>3500</b>	TUBING SIZE <b>2" EUE</b>
LINER SIZE	LINER DEPTH	PACKER TYPE
OPEN HOLE	CGG. OF ANRL VOL. <b>134.95</b>	TBG VOLUME
		STATIC BHT.

PERFORATED INTERVALS					
DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES
3236	3	hole	2		

FOR CONVERSION PURPOSES 24 BBLs EQUALS 1000 GALLONS

ARRIVED ON LOCATION: 1:50 PM

TIME	INJECTION		PRESSURE		SERVICE			(C) PROPPING AGENT OR (D) PLUGGING SERVICE			
	RATE	BBLs IN	Tab	Annul	LIQUID (A)	PURPOSE	FLA. (B) CONC.	TYPE	SIZE	CONC.	AMOUNT
3:15			600	0	X+10%AC	Acidize					
3:27		120	800	400	oil	Flush					
3:29		144	1800	1800	oil	Flush					
3:30		155	1100	1850	oil	Flush open					
3:37		190	1100	1800	oil	Flush STOP Pump					

TIME LEFT LOCATION <b>6:00 PM</b>	AVER. LIQUID INJ. RATE <b>8.6</b>	ADJ. INJ. RATE (SOLIDS INC.)	PROPS AND LIQUIDS INJECTED		
MAX. PRESSURE <b>1850</b>	AVER. PRESSURE <b>1600</b>	SHUT IN PRESSURE IMMEDIATE _____ MINUTE <b>1700 150</b>	TYPE <b>L-4</b>	SIZE OR PURPOSE <b>Acidize</b>	AMOUNT <b>3000</b>
DOWELL LOCATION <b>Hoss (Hill City 74)</b>	DOWELL ENGINEER <b>Wm. R. Laps</b>				

(A) NOTE: See (AA) FOR SPECIAL ADDITIVES

MA—MUD ACID X—HCL ACID APF—ACID PETROFRAC FA—FRAC ACID BDA—BREAKDOWN ACID LO—LEASE OIL RO—REFINED OIL DO—DIESEL OIL KE—KEROSENE PJ—PETROJEL PF—PETROFRAC FW—FRESH WATER BR—BRINE

WF—WATERFRAC M41—M41 GEL ST—STRATAFRAC VR—VERSENE SSS—TRIPLE S ACID SLW—SLICK WATER SLO—SLURRY MUD RX1—RETARDED ACID I RX2—RETARDED ACID II RX3—RETARDED ACID III

(AA) ADDITIVES IN FLUID (EXCEPT FLA\*)

CONC. IS GIVEN IN LBS. OR GALS. PER 1000 GALS. OF LIQUID

TYPE TREATED CONC.

(B) CONC. IS GIVEN IN LBS. OR GALS. PER 1000 GALS. OF LIQUID

J97—DOWELL J97 J101—DOWELL J101 J84—DOWELL J84 J98—DOWELL J98 J99—DOWELL J99

(C) SIZE IS GIVEN IN MESH RANGE CONC. IS GIVEN IN LBS. PER GALLON OF LIQUID

S—SAND WS—WALNUT SHELLS AL—ALUMINUM NY—NYLON

(D)

FF—X830 FIXAFRAC KJ—X820 GEL DO—GELLED OIL DW—GELLED WATER RB—RUBBER BALLS NCB—NYLON CORE BALLS PB—PERMEABLE BALLS MB—MOTH BALLS RS—ROCK SALT OS—OYSTER SHELLS

CALL BACK	DATE	CUSTOMER REP. CONTACTED	CUSTOMER CONSIDERED SERVICE	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/> UNKNOWN <input type="checkbox"/>	PROD. BEFORE TREATMENT TEST	PROD. AFTER TREATMENT TEST	ALLOWABLE	DAYS	ALLOWABLE
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**TREATMENT REPORT**

DWL-454-F PRINTED IN U.S.A.



DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

DATE 17 Sept. 1968

WELL NAME AND NUMBER <u>Huff #1</u>	LOCATION <u>16-1s-2G.W</u>	CUSTOMER REPRESENTATIVE <u>Tom Hinton</u>	TREATMENT NUMBER <u>03-12-2714</u>
POOL <u>Huff</u>	FORMATION <u>L-K-C</u>	JOB DONE DOWN TUBING <input type="checkbox"/> A <input type="checkbox"/> CASING <input type="checkbox"/> B <input type="checkbox"/> ANNULUS <input checked="" type="checkbox"/> C	ALLOWABLE PRESSURE Tbg: _____ Csg: _____

COUNTY <u>Decatur</u>	STATE <u>Kansas</u>	TYPE OF WELL 4 OIL <input checked="" type="checkbox"/> A GAS <input type="checkbox"/> B WATER <input type="checkbox"/> C INJ. <input type="checkbox"/> D
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TYPE OF SERVICE <u>Acidizing</u>	AGE OF WELL 5 NEW WELL <input type="checkbox"/> A REWORK <input checked="" type="checkbox"/> B	TOTAL DEPTH <u>3527</u>	CIRC. BHT. <u>7</u>
CUST. NAME <u>Gulf Oil Corporation</u>	CASING SIZE <u>4 1/2"</u>	CASING DEPTH <u>5300</u>	TUBING SIZE <u>2" EUE</u>
ADDRESS <u>600 Morton Building</u>	LINER SIZE <u>—</u>	LINER DEPTH <u>—</u>	PACKER TYPE <u>—</u>
<u>Oklahoma City 2, Oklahoma</u>	OPEN HOLE <u>—</u>	CGG. OF ANRL VOL. <u>134.95</u>	TBG VOLUME <u>—</u>

CITY AND STATE <u>—</u>	PERFORATED INTERVALS					
REMARKS:	DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES
	<u>3236</u>	<u>3 hole Rad. 1</u>				

FOR CONVERSION PURPOSES 24 BBLs EQUALS 1000 GALLONS

ARRIVED ON LOCATION: 1:50 PM

TIME	INJECTION		PRESSURE		SERVICE			(C) PROPPING AGENT OR (D) PLUGGING SERVICE			
	RATE	BBLs IN	Tab	Annl	LIQUID (A)	PURPOSE	FLA. (B) CONC.	TYPE	SIZE	CONC.	AMOUNT
<u>3:15</u>			<u>600</u>	<u>0</u>	<u>X+10%AC</u>	<u>Acidize</u>					
<u>3:27</u>	<u>120</u>	<u>800</u>	<u>800</u>	<u>800</u>	<u>oil</u>	<u>Flush</u>					
<u>3:29</u>	<u>144</u>	<u>1800</u>	<u>1800</u>	<u>1800</u>	<u>oil</u>	<u>Flush</u>					
<u>3:30</u>	<u>155</u>	<u>1100</u>	<u>1850</u>	<u>1850</u>	<u>oil</u>	<u>Flush open</u>					
<u>3:37</u>	<u>190</u>	<u>1100</u>	<u>1800</u>	<u>1800</u>	<u>oil</u>	<u>Flush STOP Pump</u>					

TIME LEFT LOCATION <u>6:00 PM</u>	AVER. LIQUID INJ. RATE <u>8.6</u>	ADJ. INJ. RATE (SOLIDS INC.) <u>—</u>	PROPS AND LIQUIDS INJECTED		
MAX. PRESSURE <u>1850</u>	AVER. PRESSURE <u>1600</u>	SHUT IN PRESSURE IMMEDIATE <u>15</u> MINUTE <u>0</u>	TYPE <u>L-4</u>	SIZE OR PURPOSE <u>Acidize</u>	AMOUNT <u>3000</u>
DOWELL LOCATION <u>Hoss (Hill City 74)</u>	DOWELL ENGINEER <u>W. M. P. [Signature]</u>				

(A) NOTE: SEE (AA) FOR SPECIAL ADDITIVES	(AA) ADDITIVES IN FLUID (EXCEPT FLA*)	(B) CONC. IS GIVEN IN LBS. OR GALS. PER 1000 GALS. OF LIQUID	(C) SIZE IS GIVEN IN MESH RANGE CONC. IS GIVEN IN LBS. PER GALLON OF LIQUID	(D)
MA—MUD ACID X—HCL ACID APF—ACID PETROFRAC FA—FRAC ACID BDA—BREAKDOWN ACID LO—LEASE OIL RO—REFINED OIL DO—DIESEL OIL KE—KEROSENE PJ—PETROJEL PF—PETROFRAC FW—FRESH WATER BR—BRINE	WF—WATERFRAC M41—M41 GEL ST—STRATAFRAC VR—VERSENE SSS—TRIPLE S ACID SLW—SLICK WATER SLO—SLICK OIL MUD—DRILLING MUD RX1—RETARDED ACID I RX2—RETARDED ACID II RX3—RETARDED ACID III	J97—DOWELL J97 J101—DOWELL J101 J84—DOWELL J84 J98—DOWELL J98 J99—DOWELL J99	S—SAND WS—WALNUT SHELLS AL—ALUMINUM NY—NYLON	FF—X830 FIXAFRAC KJ—X820 GEL DO—GELLED OIL DW—GELLED WATER RB—RUBBER BALLS NCB—NYLON CORE BALLS PB—PERMEABLE BALLS MB—MOTH BALLS RS—ROCK SALT OS—OYSTER SHELLS

CALL BACK	DATE	CUSTOMER REP. CONTACTED	CUSTOMER CONSIDERED SERVICE	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/> UNKNOWN <input type="checkbox"/>	PROD. BEFORE TREATMENT	PROD. AFTER TREATMENT
					ALLOWABLE <input type="checkbox"/>	DAYS: TEST ALLOWABLE <input type="checkbox"/>